

**THE GREAT EXPLORATIONS
ASIA AND
AUSTRALASIA**

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LONDON
DENNIS DOBSON LIMITED

**FIRST PUBLISHED IN GREAT BRITAIN
BY DENNIS DOBSON LTD., LONDON**

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**PRINTED IN GREAT BRITAIN BY
THE PITMAN PRESS, BATH**

327/R

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FOR ANDREW

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A model of Everest
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CHAPTER I

MARCO POLO

THIS CHAPTER is about Marco Polo, but he was very far from being the first explorer. Who was? The first man who ever stumbled uncertainly into a pre-historic forest, not knowing what deadly animal might be behind the next tree. Nobody knows who he was, or what he felt like, because he had no means of writing down his experiences.

Even among recorded explorers there were many before Marco Polo. For example, there were the Egyptians who already by 3000 B.C. had started to travel and had invented a system of writing in which they could set down what they discovered. Then there were the Phoenicians, who set out in their ships from their great cities of Tyre and Sidon at the eastern end of the Mediterranean.

There is an account in Herodotus, the Greek writer, of an astonishing voyage right round Africa by some Phoenician sailors about the year 600 B.C. According to the account which Herodotus heard in Egypt over a hundred years later, these men sailed from the Red Sea down to the Cape and back up the east coast, reaching home three years after they had set out. If the story is true (and from what we know of Phoenician ships and the skill of the men who sailed in them it certainly could be true) it is one of the greatest feats of exploration of all time. What a story it would be if only those sailors had left us a full account of their voyage!

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Alexander the Great deserves a mention too. Although he was a soldier and not an explorer, he travelled with his great army as far as India, far beyond the borders of the known world, which in his day (the fourth century B.C.) consisted of little more than the countries bordering on the Mediterranean.

After Alexander, there were no notable discoveries for a very long time. In fact, the next explorers of any importance were the Norwegians and Swedes who discovered and settled in Iceland and Greenland in the ninth and tenth centuries A.D. Then they went on westward, and in the year 1002—nearly five hundred years before Columbus—Leif Ericson reached America. However, Marco Polo, if not the first explorer, can be called the first *modern* explorer. He wrote an account of what he saw, which is one of the great travel books of the world.

But who was this Marco Polo, and how did he come to spend so much of his life travelling in unknown lands?

The story really opens in 1255, the year before Marco himself was born. His father, Nicolo, and his uncle, Maffeo Polo, were merchants from Venice, which at that time was a rich and important city with ships trading all over the Mediterranean. In this year, the two brothers found themselves at Constantinople in their own ship, with a valuable cargo. They were looking for new places in which they could exchange their goods, and after sailing into the Black Sea, they left their ship at a port in what is now called the Crimea. A long and difficult journey on horseback took them to the court of a Tartar chief, who received them kindly. They pleased the chief by making him a present of some jewels, and in return he gave them money and other valuables. In

fact he treated them so well that the brothers stayed in his country for a whole year. At the end of that time they wished to go home to Venice, but unfortunately their host was at war with a neighbouring chief whose lands lay across their route. The brothers were advised to try to reach Constantinople by a roundabout and little-known way which avoided the enemy's territory.

The bald account of the journey (written down, as we shall see, some years later by Marco Polo himself) says that his father and uncle 'came to a desert, the extent of which was seventeen days' journey, wherein they found neither town, castle nor any substantial building, but only Tartars with their herds, dwelling in tents on the plain'. If the details could be filled in of this very small part of the travels of the Polo brothers, it would be a tale of adventure and endurance in itself!

Beyond the desert was Bokhara, even then a splendid and well-built city. 'Here,' the author casually remarks, 'from inability to proceed further, they remained three years.' It was during their stay in Bokhara that something happened which changed the whole course of their lives. An important personage arrived in the city, on his way as an ambassador from a chief of the Eastern Tartars (the same chief whose war with their friend had prevented the brothers from going straight to Constantinople). He was bound for the court of Kublaï, the 'great Khan', or king, the chief of all the Tartars, whose court was far away in Northern China. The Venetian brothers were the first Italians the ambassador had ever met, and he seems to have taken an instant liking to them, being particularly delighted that they were able to speak to him in his own language.

Only a few days after they had met, he asked Nicolo

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and Maffeo to visit the great Khan's court with him, assuring them that they would be well received as the first of their countrymen ever seen there. They agreed to go with him, and after a difficult journey lasting a whole year, the party arrived at Kublaï Khan's palace.

The brothers found their welcome even greater than they had been led to expect by the ambassador. The great Khan ordered special feasts in their honour, and asked them many questions about their own country and other parts of Europe. He showed great interest in all they said, particularly when they told him about the kings and princes who ruled in the West, and how they governed their countries. Fortunately, they were able to answer the Khan in his own language, and their conversation pleased him so much that he often sent for them to find out more.

In these talks he often asked about the Pope, and about Christianity. Although not a Christian himself, he was anxious to find out as much as possible about that religion, and one day he asked Nicolo and Maffeo if they would return to Italy and visit the Pope on his behalf.

They readily agreed and set off, accompanied by one of the Khan's courtiers, and carrying messages for the Pope. Again they had a difficult journey; although the book simply refers to the 'extreme cold, the snow, the ice, and the flooding of the rivers', it says, as casually as before, that it took them three years to reach a port from which a ship took them to Acre, at the eastern end of the Mediterranean. Here they were dismayed to learn that the Pope had died a few months earlier. They were advised to wait until a new Pope should be elected before carrying out their mission in Rome, so they decided to

visit their own homes. When they arrived in Venice, Nicolo Polo found that his wife had died while he was away, and that she had left a son, whom he had never seen. This boy was Marco Polo himself, now fifteen years old.

There were so many delays in the election of the new Pope that Nicolo and Maffeo spent two whole years in Venice without being able to deliver their messages in Rome. They were worried that Kublaï Khan might think they were playing him false, so at the end of the two years they returned to Acre, taking the young Marco Polo with them. One of the things which the great Khan had asked them to do was to fetch him some oil from the lamp at Christ's burial place, so they visited Jerusalem for this purpose. They were about to set off back to the Khan's court, when news arrived that a Pope had been elected. Fortunately, they were already known to the new Pope, for it was he from whom they had asked advice on their previous arrival in Acre. He was still in that city when the news of his election was made known, and he at once sent messengers after the Venetians, to tell them to return to him there. When they did so, he gave them letters to Kublaï Khan, and valuable presents, and sent with them two learned friars.

Once again, the two brothers and young Marco set off eastwards, about the end of the year 1271. Before they had gone very far, they learned that the country they must cross was being invaded and pillaged by a great army from Egypt. The terrified friars handed over the letters and presents, and hurried back to Acre. The Venetians, however, being already hardened to hardship and danger by their travels, pressed forward. Once

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again, the delays and perils of the journey are dismissed in a few words, even though Marco Polo is now writing of a journey in which he himself took part. They heard news of the great Khan after they had travelled for *three and a half years*, the author says, adding simply that 'during the winter months, their progress had been inconsiderable'.

Kublai Khan, who was away from his capital, heard of the approach of the travellers while they were still a great distance off. Realizing that they must have had a terribly difficult journey, he thoughtfully sent messengers a long way to meet them, also giving orders that comfortable quarters should be made ready for them in every place through which they had to pass.

When at last they reached the Khan, he had all the principal noblemen of his court assembled to receive them. He asked to hear the whole story of their travels, listening with the greatest interest to all they had to say. When they had finished, and had read out the Pope's letters and given him the presents, the great Khan was full of praise for the way in which they had carried out their mission. Marco was received with great kindness, and with the words, 'he is welcome, and it pleases me much'. Then feasts were held in honour of the Venetians, and all the time they remained at the Khan's court they were especially favoured by him.

Marco Polo, by now about twenty-one years old, became a great favourite at the court. He seems to have had a gift for languages, and soon learned to read and write in several. The Khan began to send him to different parts of his vast kingdom on important business, and was very pleased with the efficient way in which he carried out these missions. The next seventeen years of

his life were spent in this way, and he had wonderful opportunities of visiting different parts of the Far East, where no European had ever been before. Wherever he went he made careful notes of the customs and ways of living of the people, partly for his own interest, and partly because the Khan was always anxious to hear new things from him on his return. The greater part of Marco Polo's book consists of detailed descriptions of the places and people he saw during these journeys, and it is to these that it owes much of its interest.

During this time he became such a favourite with Kublaï Khan that the officers of his court became jealous, and they must have been pleased when at last the three Venetians told him that they would like to revisit their own country.

Kublaï Khan was by now a very old man, and the Polos thought that if he died their chances of ever seeing their homes again would be small indeed. But when one day Nicolo seized a favourable opportunity of asking for permission to leave, the Khan was very hurt that they should want to do so. Anything else they wanted he would readily give them, he said, but this request he could not grant.

However, an opportunity came to them. It happened that the Khan of Persia had sent ambassadors to Kublaï to choose him a wife. The future bride had been chosen but the return journey to Persia by land was too dangerous to be attempted, owing to wars among the Tartar tribes. Marco Polo had just returned from a voyage, and the ambassadors asked if the Venetians, as skilled navigators, could come with them by sea to Persia. Kublaï Khan reluctantly agreed to let them go, on condition that they promised to return to him after spending some

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time with their family in Venice. They were given authority to travel through all parts of his kingdom, and also to act as his ambassadors to the Pope and to the European kings.

At last the travellers set sail in the direction of their own country, which they had not seen for so many years, but their troubles were far from being over. They had a tremendous journey before them. The sea voyage to Persia alone took eighteen months; and one third of the men who were crowded together in their fleet of fourteen ships died on the way. Kublai Khan had given orders that stores and provisions for two years should be taken aboard, but with men who were not used to such long voyages it is surprising that the cramped conditions did not cause an even higher death-roll. Even as late as the seventeenth and eighteenth centuries, Lord Anson and other navigators were to lose the same proportion of their men.

When they reached the Persian Khan's court, with his intended wife, they found that he had died some time before. The travellers asked what should be done with the princess, and it was suggested that they hand her over to the late Khan's eldest son, who was then away on the borders of the kingdom. After doing this, they returned to the Persian court, where they took a well-earned rest for nine months. Leaving there, once again with a promise of help and protection throughout the kingdom, they set off for home. It was soon after starting on this last long journey that they heard with sorrow of the death of their friend and benefactor, the great Kublai Khan.

By way of Constantinople they at last reached Venice, where 'in the enjoyment of health and abundant riches,

they safely arrived in the year 1295'. They had been away about twenty-five years—Marco, a youth when he had left home, was now a middle-aged man, rich and famous. The three of them arrived dressed in Tartar clothes, and since it was a long time since they had been used to speaking Italian, they at first found difficulty in talking in their native language. There is a story that at first they were not recognized by their relatives, who refused to have anything to do with them until they ripped the lining of their shabby Eastern clothes and produced jewels of enormous value.

But even now, Marco Polo was not to find that his adventures were over. For the next three years he seems to have lived in peace and prosperity in Venice, although Venice was at war with Genoa. In those days, wealthy citizens were called upon to equip a fighting ship in time of war, and Marco Polo sailed in command of his ship to fight the Genoese. In 1296 the Venetian fleet was defeated, and with others Marco Polo was captured. The next three years he spent as a prisoner of war in Genoa, one of his fellow-captives being a certain Rusticiano from Pisa. This Rusticiano seems to have been a man of great curiosity and patience, for it was he who persuaded Marco to dictate to him an account of his travels. Extraordinarily enough, until he was captured, Marco had no intention of gathering together in this way all the information he had collected!

Thus it happened that one of the world's great travel books was written almost by accident. It was not believed in the author's own day—in fact the map of Asia was not altered as a result of his discoveries until fifty years after his death. It is said that when he was dying his religious friends tried to get him to admit that his

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tales of the East were lies, and he replied, 'I have not told half of what I saw'. However, long after his death, scholars proved that nearly everything he said was true.

Marco Polo's great achievement, apart from his travels themselves, was to tell the Western world about the East. The civilized peoples of Western Europe, inclined, like some of us in more recent times, to look on everyone else in the world as barbarians, learned of an entirely different way of life many thousands of miles away. Far from being savages, these Eastern peoples lived in great cities, much larger than any in Europe. Their kings had vast palaces with golden roofs and surrounded by broad parklands. This, for example, is Marco Polo's description of Kublaï Khan's summer palace (at Cambaluc):

'There is a great square wall with sides a mile long. In each corner stands a most beautiful and rich palace. . . . Further in the middle of each side is another palace similar to those in the corners . . . and all eight palaces are full of war-equipment. Within this wall is another wall. Round it, also, are placed eight palaces, in which likewise war harness is kept. In the middle of these circuits of walls rises the palace, the largest that was ever seen. It has no upper floor, but the basement is ten palms higher than the ground surrounding it, and the roof is surpassingly high. The inside walls are covered with gold and silver, and on them are painted beautiful pictures of ladies and knights and dragons and beasts and birds. The great hall is so vast that quite six thousand men could banquet there. The beauty and size are so great that no man could have built it better. The roof is varnished in vermilion, green, blue, yellow and all other colours, so that it glistens like crystals. Moreover,

behind the palace there are great palaces and halls where the treasures are kept.'

When a feast was given there were thousands of guests, and each pair 'had a golden cup with a handle, and with it (he) draws his drink from the large golden vessel, one of which is placed on the table for every two guests'.

There was a great canal, twelve hundred miles long, carrying ships from the sea as far inland as Pekin. Paper, printing, astronomical instruments and many other inventions had been discovered by the Chinese long before Europeans knew of them.

Then, among many other wonders, Marco Polo describes 'a kind of black stone, which they dig out of mountains, where it runs in veins. When lighted, it burns like charcoal, and retains the fire much better than wood, insomuch that it may be preserved during the night, and in the morning be found still burning.'

In another place, he tells of a fibre which was found in the earth, and made into a kind of cloth which resisted the heat and would not burn even when put in a fire. Thus we can read in Marco Polo's pages of coal and asbestos long before either was known in Europe.

Although Marco Polo had little influence while alive, the existence of over a hundred manuscript copies, scattered over Europe, proves that his book was read. (It was not printed until the middle of the sixteenth century.) One of these copies, with notes made by the owner, is particularly interesting. It belonged to another great traveller, who used it to work out how he could sail across the Atlantic to India. When he tried to do so, he reached America. His name was Christopher Columbus.

CHAPTER II

LUDOVICO DI VARTHEMA

AFTER MARCO POLO, European travellers continued to visit China for some time. A number of missionaries travelled widely there; one founded a Roman Catholic church in Peking; another was the first European traveller for many hundred years to visit Lhasa, the 'forbidden city' of Tibet. Merchants from Florence and Venice traded with China, mostly following a more northerly route than Marco Polo had done. In fact, this northern route to Mongolia became so popular that in 1350 a guide book was published for the use of travellers!

But then, later in the fourteenth century, travel to the East became much more difficult and dangerous. Turkish armies conquered a great part of Asia, and the Turks imposed on their subjects their own hatred of Christianity. Further East, China was no longer ruled by the friendly Khans, and the would-be traveller from Europe found many hostile peoples barring his way.

However, these early glimpses of Asia had made Europeans want to see more. The Portuguese, trained to be skilled seamen and navigators, found their way to India by sea, by making long and daring voyages round the Cape of Good Hope.

Vasco da Gama reached India in 1498 by sea, and only four years later a traveller perhaps as great as Marco Polo set out from Europe for the East by land. His name was Ludovico di Varthema, and apart from



the fact that he was an Italian of good family, nothing is known of him. Like Marco Polo, he left an account of his travels, but unlike Marco, he was not a merchant. At the beginning of his book, he gives as his reason for travelling 'a desire to behold the various kingdoms of the world', adding that he decided to see those countries 'which had been the least frequented by the Venetians'.

At the end of the year 1502, then, he left Venice for Alexandria. Alexandria and Cairo, being 'well known to all', did not detain him long, and away he went into Syria. The first Eastern city to be described in full is Damascus, which Varthema found to be large and wealthy, with plenty of grain and meat and a wonderful variety of fruits.

The city, he says, was inhabited by Mohammedans, whom he calls Moors, by Mamelukes and by Greek Christians. These Mamelukes were Christians who had been bought as slaves by the Governor of Damascus, had changed their religion and become Mohammedans. They were trained as soldiers, and could be bought by any military officer who would feed them at his table and supply them with clothing, a horse, and weapons.

The Moors are described as dressing in long robes, eating and cooking their meals mostly in the street. Goats' milk was sold among them every day, and the sellers would bring their animals into people's houses and milk them in front of the customer!

As for the Christians in Damascus, they were mostly engaged in trade, and had many warehouses, but were badly treated by the Moors and Mamelukes.

Varthema spent several months in the city, learning Arabic, and then he heard of a caravan which was about to set off for the holy city of Mecca. He made friends

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with the Captain of the Mamelukes who were to guard the caravan, and this man dressed him like the others and provided him with a horse.

Thus Varthema, dressed as an Arab, set off on the travels which were to lead him to many places never before visited by Europeans. At some time, he evidently became a Mohammedan like the rest of the Mamelukes, but as his book was intended for Christian readers, he says little about this.

The caravan was a very large one, consisting of 35,000 camels and 40,000 people. It was guarded by only sixty Mamelukes, apparently a small protection from the Arabs 'in such vast numbers that they cannot be counted', who were constantly lying in wait for the caravans. Varthema explains this in a highly boastful manner, by saying that the sixty were a match for forty or fifty thousand Arabs!

Describing the Mamelukes as the best soldiers in the world, he tells how he saw one shoot a pomegranate off a slave's head at a distance of twelve or fifteen paces. The Arab raiders, on the other hand, seem to have relied on the speed of their famous horses, on which Varthema said they appeared to fly rather than run. They often made surprise attacks, but were beaten off without much trouble.

The great caravan pressed on across the desert, riding for a day and a night, and then when a signal was given, stopping for the same period. Every eighth day, if they had not found a well, they would dig for water, and then a longer stop was made. At one point, a number of people died of thirst and were buried in the sand.

Soon afterwards the caravan had halted at a well, when a great band of Arabs came up and demanded

payment for the water. The travellers refused, saying that the water came from God, whereupon the Arabs attacked. The Mamelukes fought from inside a wall of camels, and the battle lasted two days and two nights, until neither side had any water left. Since the caravan was surrounded, and the Mamelukes could fight no longer, money was offered to the Arabs. After accepting it, they said it was not enough.

The next morning the caravan moved on, leaving behind all the men who were capable of fighting. The battle began once more, and according to Varthema's story, 1,600 Arabs were killed, while the others lost only 'one man and one lady killed by bows'. To account for this, however, he points out that the Arabs had no armour, and that their only weapons were lances and bows and arrows.

Soon after this the caravan reached the holy city of Medina, described as a poor sort of place, with about three hundred houses and surrounded by mud walls. The first day he was taken to see the mosque where Mahomet was buried, and his description of it has been proved most accurate by later travellers. The captain of the Mamelukes demanded to see the body of Mahomet, but the priest in charge refused, telling him he was not worthy to do so. The captain then flew into a rage, and forbade any of his men to visit the mosque again.

In the night a number of old men came to the camp, calling out and drawing attention to a mysterious light coming from the mosque. This was supposed to be a sign to guide pilgrims to Mahomet's tomb, but Varthema says that the light came from fires which had been lit at the top of the tower to make people think it was a miracle.

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After three days the caravan went on towards Mecca, passing through a part of the desert where the sand was very fine, and where they experienced a sandstorm in which they could only see a few paces. If the wind had been in another direction, Varthema remarks, they would all have been dead men. An interesting thing mentioned here is that the Arabs cross this desert in wooden cages on the backs of their camels. This has often been mentioned by other travellers, and was still the custom until less than fifty years ago, when the railway from Damascus to Mecca was built. Travel in the desert has only changed very recently, with the arrival of modern transport, and the type of caravan in which Varthema travelled over four hundred years ago can be remembered by travellers who are still alive.

Apart from the danger of sandstorms there were other things which made their journey from Medina to Mecca unusually perilous. A great war was going on, as four brothers were fighting over who was to be the lord of Mecca. The Mamelukes fought twice with great bands of Arabs before the caravan arrived safely at the second of the holy cities.

Varthema found Mecca a most noble and beautiful city, very different from Medina, with many fine houses. It was even more crowded and bustling than usual, as another caravan had arrived from Cairo only a few days before. Thousands of pilgrims were gathered together in the city, as well as many merchants, for it was a great trading city. From India and Ethiopia traders had come with jewels and spices, cotton, silk, and various kinds of perfume. Most of us have seen somewhere a picture of an Eastern market, and they have changed very little since Varthema's day. It is not difficult to imagine the

noise and bustle, the babble of different languages, the bright colours of the goods on sale—all the sights and sounds he enjoyed so much, and which he was the first European to experience.

But as well as being a great market, Mecca was then, as it is today, the holy city which faithful Mohammedans try to visit at some time during their lives. In the centre was the great mosque, with its walls all covered with gold inside, and perfumed with sweet odours which Varthema found it impossible to describe. Here all the pilgrims came. They had to go seven times round a certain tower, touching and kissing each corner. Then they had water thrown over them, which was supposed to wash away their sins.

Many sheep were killed as a sacrifice, and the meat given to the poor. Varthema noted that the poor of Mecca were so hungry that they even gathered round the pilgrims' tents and scrambled for the rinds of the cucumbers which had been thrown away in the sand.

In one part of the temple Varthema saw a most extraordinary sight. There were two animals, brown in colour and with legs and feet like a goat—and each had one horn on its forehead. He had no doubt that they were unicorns; they had been presented to the Sultan of Mecca by an Ethiopian king as 'the finest things that could be found in the world at the present day'.

They were certainly a great rarity; in fact, scientists have never been able to agree whether the unicorn ever really existed. The animal is mentioned in the Bible, and by several ancient authors. One explanation is that these references are to the rhinoceros, but that certainly does not fit the animals Varthema saw. It has been suggested that the creatures were ordinary gazelles, or something

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of the sort, but with one horn missing apiece. At any rate, judging by the accuracy of most of his descriptions, it looks as if Varthema saw two animals closely resembling the unicorn which you can see on our Royal Coat of Arms.

So far Varthema had been successful in visiting unknown regions and, as we have seen, had been the first European Christian to visit the holy cities of Arabia—Medina and Mecca. What makes his achievement even more remarkable is that, even in the nineteenth century, when a number of Europeans visited Mecca, not one did so by the long and dangerous route he had taken more than three hundred years earlier.

Still anxious to travel further into unknown lands, Varthema was considering how to escape from the caravan before it started on its return journey. One day he was in the market, when something happened which gave him a shock, but showed him a way to do what he wanted. He was recognized by an Arab, who asked him where he came from. Varthema replied that he also was an Arab—the man did not believe him, but asked him to come to his house. Once there, he spoke in Italian to Varthema, who said that he was from Rome, but had become a Mameluke in Cairo. The two became friends, and the Arab agreed to hide Varthema in his house if in return he would bribe the captain of the caravan to let fifteen camel-loads of spices through without paying customs duty. This was easily done, and on the day before the caravan set off, Varthema hid in his friend's house. He was terrified to hear men going through the city, blowing trumpets and ordering all the Mamelukes to get ready for their journey back to Syria.

The Arab merchant went off with the caravan, leaving

the deserter hidden in his house with his wife and her young niece. The merchant's wife had instructions to send Varthema off with the caravan for India, which was due to leave in a few days' time. Varthema must have been a man of remarkable personality, and the two ladies (as he does not forget to point out) were much impressed by him. They implored him, he says, to stay behind, and were broken-hearted when he refused.

For, in spite of all their entreaties, he went off with the caravan as far as Jidda, on the Red Sea, still an important market and port. Here he went at once to a mosque, where there were thousands of poor pilgrims, and here he spent the next fourteen days. All day long he lay on the ground, he tells us, 'keeping up a constant groaning, as though I were suffering intense pain in my stomach and body'. When the merchants asked who it was who groaned so, the pilgrims around him said that he was a poor Moslem who was dying. Every evening he stopped groaning and went off to buy food, but was only able to get one meal a day, and a poor one at that!

After fourteen days of this, Varthema persuaded the captain of a ship bound for Persia to take him as a passenger. They set sail into the Red Sea, which, Varthema remarks, 'is not red, but the water is like that of any other sea'. The ship anchored every night owing to the number of islands and sunken rocks, and during the day a lookout was always posted at the masthead. After several stops, at one of which they beat off some Arabs who attacked them, they reached Aden, where all ships trading with India used to call. Here the customs men came on board and made a careful examination. So that the ship could not get away without paying duty on its

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cargo to the Sultan of Yemen, the local ruler, its masts, sails, rudder and anchor were all taken away.

Now another adventure befell Varthema. Someone on board was heard to call him 'Christian dog, son of a dog', the Moslems' usual greeting to anyone who had been brought up as a Christian but had become one of them. He was taken to the Sultan's prison as a suspected spy. The Sultan was away from the city, but fortunately for Varthema's peace of mind, he heard that the Sultan was an unusually merciful man, who never put anyone to death. However, Varthema was kept in prison, with heavy fetters on his legs, to await the Sultan's return.

The people of Aden were afraid of Portuguese spies, as the Portuguese had recently appeared in the Arabian Sea for the first time, and had captured a number of ships. A band of Arabs who had escaped from these captured ships tried to break into the prison and kill Varthema, who they said was a spy. However, the guards barred the door, and eventually the rioters went away.

After Varthema had been in prison over two months, the Sultan sent for him and, still in chains, he and another prisoner were put on a camel. After an eight day journey, which must have been remarkably uncomfortable, they reached the Sultan, who was reviewing his troops before going to war with a neighbouring ruler.

Varthema was brought before the Sultan, and even in this dangerous situation he seems to have kept his wits about him. When asked who he was and where he came from, he replied that he was from Rome, but had become a Mameluke at Cairo. He added that he had visited the two holy cities, Mecca and Medina, and that

he was no spy but a good Mohammedan. (Of course this was not strictly true.) The Sultan, not quite convinced, told Varthema to repeat the words in which Moslems announce their belief in God and His Prophet. Varthema, probably from fear, found himself unable to do so, and for a moment it looked as if his life would answer for it.

However, once more he was lucky, for the merciful Sultan ordered him to be taken back to prison again and carefully guarded until he himself returned. Back to prison he went, while the Sultan with his army went off to war. The next three months were spent in prison, on a diet of bread and water.

Now, he knew that in the East a madman was believed to be possessed by a spirit, and so was treated as not being responsible for his actions. He and his fellow-prisoners decided that one of them should pretend to be mad, in order to help the others. They drew lots, and it fell to Varthema to feign madness. He found it a trying business, for although he was allowed to leave his cell, crowds of children jeered and threw stones at him all day.

The scheme worked well, however, thanks to Varthema's lively and attractive personality. One of the Sultan's wives noticed him and took a fancy to him. She was evidently bored, and Varthema, to amuse her, played his part as a madman as entertainingly as he could. One day, for example, he asked a sheep to declare its religion, and when the unfortunate animal made no reply, he killed it. There was certainly method in this particular piece of madness as it meant that he had fresh meat to eat for some days!

In Mohammedan countries at that time, lunatics were

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treated more humanely than, for example, in England, where they were put in chains and jeered at. In Arabia it was the custom to examine mad people at intervals to see whether they were better or worse. Thus two hermits were sent for to examine Varthema, but they could not agree, one saying he was mad and the other not, and arguing for hours.

He was now a great favourite with 'the queen', as he calls her. He had been put in a cell by himself, as his two companions had been found trying to dig a tunnel out of their prison. At last the queen persuaded the Sultan to release Varthema, so his fetters were taken off and he was sent to her palace to recover his health after so long in prison.

The wily fellow soon thought of a scheme for escaping. He pretended to be ill and then told the queen that he wanted to visit a holy man at Aden who could work miracles and could cure him. She unsuspectingly supplied him with a camel and some money, and off he went. On reaching Aden Varthema carefully visited the holy man and pretended to be cured. He wrote and told the queen this, adding that he would like to explore the country for a while. The idea of this was to gain time, because a fleet of ships bound for India was in Aden and would not leave for a month. In the meantime, he arranged his passage with the captain of one of the ships, and then set off on his month's journey.

Probably he travelled mostly with caravans, and certainly he kept his eyes open and his wits about him. He explored what is now called Southern Yemen pretty thoroughly, visiting many cities and accurately describing their trade and the dress and customs of their people. The only danger he mentions in this trip is from hyenas,

a great number of which were killed with stones and arrows. Back in Aden once more, he tried his old trick again, going into the mosque and groaning on the floor all day.

That night the captain of the ship smuggled him aboard, and the next stage of his travels began. Setting sail for Persia, *en route* for India, the ship was driven off her course, and with difficulty made a port on the Ethiopian coast. After a few days there the wind changed, and they were able to regain their course. Crossing the Arabian Sea, probably picking up cargo here and there, like a modern tramp steamer, eventually they reached the once famous city of Ormuz, at the entrance to the Persian Gulf. Although Ormuz had been visited by Marco Polo and other travellers, it was not the same city at which Varthema now arrived. Soon after Marco Polo's time, the people had left the old city and founded a new one on an island opposite.

As others had noted, Ormuz was famous for its pearl fisheries. It is interesting to note that John Milton refers to 'the wealth of Ormuz' in *Paradise Lost*, over 150 years after Varthema's visit.

Varthema describes the way the pearl fishers worked. They went out in little boats three days' journey, and then anchored by heavy stones head and stern. Another stone attached to a rope was thrown overboard, by which the diver could haul himself up. He lowered himself by tying a stone to his feet, taking a bag round his neck for the oysters, and stayed down as long as he could. The pearls here, according to Varthema, were the largest in the world.

Leaving his ship at Ormuz, our traveller crossed to the mainland of Persia, and set off to explore the

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country. He says very little about this stage of his travels, perhaps because at that time a good deal was known in Italy about Persia. Not long before, Venice had sent ambassadors to try and persuade the Persians to join with them against the Turks, who were greatly damaging the Venetian trade with the East. These ambassadors wrote an exciting account of their travels and adventures, and the book had become what we now call a 'best-seller' in Italy.

It is a pity Varthema says so little about his journey in Persia, for he must have covered about 1,500 miles. The city of which he has most to say is Shiraz, then a great centre for trade in precious stones, especially rubies. Musk, a favourite scent in Western Europe in those days, was also dealt in a great deal.

One thing which seems puzzling, especially in these days of expensive travel, is how Varthema managed to get so far on so little money. He was not engaged in trade, and he does not seem to have been a rich man. He would have been paid for his services in guarding the caravan as far as Aden, and the money the queen gave him would have carried him on for some time. But once again his talent for making people like him came to his aid. In Shiraz he met a Persian merchant who had known him before in Mecca. This man, whose name was Cazazionor, suggested to Varthema that he should go to Samarkand with him, as he needed a companion for the journey. Presumably Cazazionor, a rich man, paid all the expenses.

Once more Varthema found himself travelling through a country at war. Indeed, things were so disturbed that his new friend thought it best to return to his home, taking Varthema with him. By this time the two were

close friends, so much so that Cazazionor tried to persuade Varthema to settle in Persia and marry his niece. But Varthema refused, saying that he had a wife and children at home in Italy, and after a few days the two set off again, this time for India.

CHAPTER III

VARTHEMA IN THE FAR EAST

THE TWO travellers left their ship at the mouth of the great river Indus, and went to the nearby port of Cambay. This part of India, now known as Gujarat, was ruled by a Sultan who was feared by all his people. His moustaches, Varthema tells us, were so long that he tied them up over his head, and he had a white beard down to his waist. His people believed that he ate poison every day without any effect on himself, but he had only to spit at an enemy for it to kill him instantly. The Sultan was enormously wealthy, as his country supplied a great part of the East with silk and cotton. He lived in great state in his palace, and several times a day fifty elephants were led there to do him reverence. When he took his meals, fifty or sixty different kinds of musical instrument played to him.

Taking ship again after a few days' land-travel, the two friends sailed along the coast to the island of Goa, shortly to become a great centre for Portuguese trade. To this day Goa is Portuguese, the last trace of the adventurous seafarers and merchants who first opened up India to European trade. In spite of the fact that there was constant warfare between the two neighbouring kings of this coast, the travellers were allowed to go where they liked without interference.

The next important place they visited was Narsinga, where the military governor ruled like a king, and in

fact Varthema refers to him as the king. The city is described as 'a second paradise', with a beautiful situation and delightful climate. The governor kept great state, and had four hundred elephants. Varthema was most impressed by the intelligence and strength of the elephant, which in those days before zoos was quite unfamiliar to Europeans. The animal was often used in battle, with special armour for its head and trunk, and attached to the trunk a great sword. Two men sat on its back, and directed the elephant where to strike with the sword. Then as now, these great animals were used for peaceful tasks, and Varthema saw three of them beaching a ship broadside on by pushing it with their heads. His description of the animal itself is very accurate, even to the slow and swaying walk which affects those who are not used to riding on its back like sea-sickness.

After only two days in the 'noble city' of Narsinga, the travellers set off again and at length reached Calicut, far down towards the southern tip of India. This had been a famous port for many centuries—in fact, although Malacca, on the Malay Peninsula, had already begun to take its place, it was still in Varthema's time the main centre for Eastern trade. Most of its trade had grown up from the efforts of Arab sailors, as the Hindus who lived there were indolent and no seamen. Later on, Calicut was to add a new word to the English language—calico.

Varthema's account of southern India, although not as good as those of other travellers, is quite accurate and observant. He describes the different castes or classes of the people on the Malabar Coast; the Brahmins, or priests; the Nairs, or warriors; the artisans and so on. The two lowest castes could not come within fifty paces

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of a Brahmin without permission; they lived very poorly on such food as mice and dried fish.

One custom of the people of this part of India seems a good deal more sensible than some of ours today. When they went to war, and the two armies approached one another, one king would order priests to go to the enemy camp and ask that one hundred warriors should fight on either side. The fighting was carried out by strict rules, and when from four to six men were killed on either side, the warriors went back to their own camps. In this way, instead of hundreds being killed in battle, the casualties were kept down to a very small number.

Varthema tells how the people had black teeth because of their habit of chewing a nut called betel (still done in many parts of the East); of their skill in ship building; how pepper trees and ginger roots were grown; and the many uses of the coconut palm, 'the best tree in the world'.

A 'kind of serpent' is described, as long as a great pig, but with a head much bigger than that of a pig. How many who have seen one at the Zoo would be able to guess that Varthema was referring to a crocodile?

His Persian friend had told Varthema that his purpose was to travel, not to trade, but all the same he had brought goods with him and was anxious to find a market for them. There was no chance to trade in Calicut, so the two of them went up a river to another city, which has now disappeared, but was then important because the finest quality pepper was grown there.

Taking to the sea once more they went round the southern point of India until they reached a port opposite Ceylon. Here Cazazionor sold some of his goods,

but as the place was at war the friends hired a flat-bottomed boat and sailed across to Ceylon. Here again conditions were far from peaceful, as the different rulers of the island were fighting one another. Another reason for leaving in a hurry was that Cazazionor was told by a rival merchant that the king to whom he intended selling his goods would double-cross him. Accordingly the two friends went back to the mainland of India, this time to a town north of Madras. Here they stayed with a Moorish merchant who bought some of the goods Cazazionor had brought with him.

Yet again warfare forced them to move on, and this time they sailed across the Bay of Bengal to the Malay Peninsula. After Cazazionor had sold some more of his goods, the two travellers sailed back across the Bay of Bengal to an Indian city which has since disappeared.

Here a most surprising thing happened. The friends fell in with a party of Chinese traders, who were not only Christians themselves but said there were many more like them in China. (This had been remarked upon nearly two hundred years before by a missionary called Friar Oderic.)

The Chinese merchants became friendly with Varthema and Cazazionor, and when the latter showed them some very fine coral which he still had for sale they suggested that they should all go together to Burma where coral was much in demand. Off they went on a thousand-mile journey to a city called Pegu, not far from Rangoon.

But the King of Burma was away at the wars. The travellers tried to follow him, but could not get far because of the fighting. However, the King soon returned and an audience was arranged with him.

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The King 'wore more rubies on him than the value of a very large city—in fact, he was weighed down with precious stones, so that he shone at night like a sun'. When he saw the corals, he wanted them very much, exclaiming that they were the finest he had ever seen. But his wars with the neighbouring king had made him poor and he suggested that the corals should be exchanged for rubies. Cazazionor and Varthema told him that they were his in return only for his friendship. Such generosity pleased the King. Not to be outdone, he sent for a box full of rubies and presented them by the handful to the travellers.

So, very much richer than before, the two left Pegu with their Chinese friends, the King having gone off again to fight his neighbour. Their next port of call was Malacca, opposite the great island of Java. It is not certain that Varthema was the first European to visit this most flourishing Eastern port, but he was the first to leave a description of it. Here were the great unwieldy Chinese junks like floating towns, with gardens of flowers on their decks. Dyes, perfumes, silks, precious woods, and all the produce of the Far East was exchanged there; but it was not safe to stay ashore, and all the merchants slept aboard their ships for fear of attack.

The party next crossed to Sumatra, where they found the people more friendly. They were also good swimmers and 'excellent masters of the art of making fireworks'.

The Chinese were now thinking of going home, but Cazazionor had a great wish to see nutmegs and cloves growing. He was told that these were to be found on an island three hundred miles away, which could only be reached in a small ship, called a *sampan*. The Chinese

found two such ships for him, and the cunning Persian, who wanted them to act as guides for him, worked on them until they agreed to go further.

So the whole party set sail for the Spice Islands, which Varthema was the first European to visit, not even Marco Polo having ventured so far to the east. The first island on which they landed (presumably that now known as Great Banda, the largest of the group), they found 'ugly and gloomy' and inhabited by 'some peasants, like beasts, without understanding'. The people had no king or even governor, and did not need laws, as, according to Varthema, they were so stupid that they could not commit crimes even if they wished!

This description has cast some doubt on the truth of Varthema's story, as Banda is in fact a most beautiful island, with luxuriant woods coming right down to the water's edge.

Whether Varthema really visited Banda or not, the publication of his book was the beginning of a most unhappy chapter in the history of these little islands. Two years after his book appeared, a Portuguese ship called at Banda. It was the first of many, and the unfortunate islanders were conquered and led into slavery, first by the Portuguese and then by the Dutch—all because of their nutmeg trees.

The nutmeg is the kernel of a fruit rather like the peach, which grows in great numbers, sometimes as many as a thousand on a tree. The fruit itself yields mace, an even more precious spice, so that a grove of nutmeg trees was a very valuable possession.

Two days on Banda was enough for the travellers, but at least Cazazionor had fulfilled his wish to see the nutmeg growing. The next island visited was one of the

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Molucca group, and Varthema had nothing good to report here.

However, his desire to see new lands and people seemed never likely to be satisfied, and he probably egged the party on to see 'the largest island in the world, and the most rich'. To do this, the Chinese merchants said, they must first go to another island, called Bornei, and take another ship, for the sea was rougher. Bornei was at one time thought to be Borneo, but it is more likely to have been Buru, between Celebes and New Guinea.

The remark about 'the biggest island in the world', which possibly refers to Borneo itself, is particularly interesting, as during this amazing voyage in the East Indies the travellers were only a few hundred miles from Australia, really the biggest island, which was not to be discovered until hundreds of years later.

The Chinese now tried to persuade Varthema to go to China with them, telling him that if he did he would become a very great lord. Varthema must have been tempted to go, but he realized that if he did it would have been impossible for him ever to return to Europe. He does not seem to have bothered about loyalty to his faithful Persian friend. In fact, as we have already seen and shall see again, he was always ready to desert any friend when it was to his advantage to do so. However, it would have been difficult to slip away now, and then perhaps the heat and discomforts of the climate were beginning to wear down even his powerful constitution.

From Bornei, which Varthema found to be a much more civilized island than those he had just left, they sailed in another ship for Java. The captain of the ship had a good chart and a compass. When asked what star

the ship was steered by at night when the North Star was no longer visible, it being the southern hemisphere, he pointed out the opposite star. Then he said something much more extraordinary—that beyond Java there were sailors who navigated by the Southern Cross, that down there it was much colder than in any other part of the world, and that daylight only lasted four hours. This seems to indicate a knowledge of navigation as far as Australia and beyond long before Europeans had ventured into those regions.

The Javanese Varthema found to be civilized people in many ways, and 'the most trustworthy in the world', in spite of the fact that some were cannibals and used blow-pipes with poisoned darts. While in Java it was brought home to him how far he was from his own country by the Chinese pointing out that the sun cast a shadow a different way from the shadows in the northern half of the world. He was told it was the month of June, and admits that he had lost count of time. It was in fact about three and a half years since he had left Italy.

Tales of cannibalism frightened the travellers, and they decided not to run the risk of being carried off and eaten. They hired a junk in which they could navigate the open sea, sailed along the east coast of Sumatra and back to the great port of Malacca. Here, after Cazazionor had bought a cargo of spices, silks, and perfumes, the party split up. The Chinese stayed behind, with many lamentations at leaving their companions after so long, and Cazazionor and Varthema sailed for India.

At Negapatam, in southern India, they unloaded their cargo and chartered another ship for Quilon, round the southern tip of India, where they found a number of

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Portuguese. Now on the voyage out Varthema had called at places where there were Portuguese traders, but had carefully avoided them, lest it should be discovered that he was an Italian and a renegade Christian.

This time, though, he seems to have become homesick at last and made up his mind to escape. But the Portuguese at Quilon were too few to protect him from the Arab traders, who would have had no mercy if they had found him out as an impostor.

However, at Calicut he found two Italians, great favourites of the king, as they had taught his people how to make guns to fight the Portuguese with. These two wanted to return to Europe, but were in the same position as Varthema; they were afraid of what the Portuguese would do to them for helping their enemies. Varthema spent some time with these two, discussing plans, and explaining his absences to Cazazionor by saying that he had gone to the mosque to pray. To avoid suspicion, he behaved like a strict Mohammedan in public, eating no meat, but making up for it by eating chicken every night at the house of the Italians.

By these deceitful methods Varthema became well known and well thought of. When, more by luck than judgment, he cured a merchant who was very ill, his reputation increased. Helped by the unsuspecting Cazazionor, he became known as a kind of saint, while all the time he was planning to escape to the Portuguese.

At this time great alarm was caused among the Arab traders by the news that a Portuguese fleet had arrived at Cannanore, a little further up the coast, where the Portuguese were building a fort. The Arabs knew that their trade would be ruined if the Portuguese became firmly established, so they flocked to the mosque to

pray. They took Varthema with them, and with the greatest hypocrisy in the world he actually led the prayers.

His next move was to pretend that he was ill and that the air of Calicut disagreed with him. His friend Cazazionor, who was deeply attached to him, and deserved better treatment, suggested that he should go to Cannanore until they could return to Persia together. The wily Varthema, after pretending to hesitate for fear of the Portuguese, slipped off in a boat with two Persian merchants who were trying to avoid the local customs officials.

But they were only just offshore when a voice from the jetty called out to them to bring Varthema back. They had no alternative but to put back. The two Persians asked Varthema what they should do next, and he suggested that they should make their way along the shore until they found a ship. Carrying the contraband goods, they made their way twelve miles along the coast, in terror all the time lest they should be overtaken. However, at last they found a ship and reached Cannanore in safety.

Varthema went at once to a merchant to whom Cazazionor had given him a letter of introduction. The hospitable merchant prepared a feast; but Varthema in his pose as a holy man had to refuse all the meats that were placed before him. After the meal the party took a walk by the sea, and Varthema carefully noted the place where the Portuguese were building their factory and fort.

He made up his mind to escape to them the next day, and getting up early went for a stroll. The Persians went with him, but he managed to get ahead of them on his

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way to the fort. He happened to meet two Portuguese, and declared to them that he was an escaped Christian. One of them at once took him to the fort, and presented him to the Governor, Don Lorenzo de Almeyda. Varthema fell on his knees before him and begged him for protection, saying once again that he was a Christian.

At this moment there was a great uproar from the city, as Varthema's escape had been discovered. The guns in the fort were manned, and for a moment it looked as if there would be trouble. However, things quietened down and Varthema was able to tell Don Lorenzo about the preparations for war against the Portuguese which were being made at Calicut.

The Governor sent Varthema to his father, the Viceroy, who was at Cochin, one of the great Portuguese strongholds. The Viceroy received him very well and Varthema gave him all the information he could about events in Calicut.

As for his faithful and generous friend Cazazionor, there is no indication that Varthema felt any compunction in deserting him in such a shabby fashion.

We can only imagine the feelings of Cazazionor, who was extremely fond of Varthema, at the way his kindness was repaid. As for Varthema himself, now back among Europeans, he soon started to refer to his former friends as 'Moslem dogs', for the hatred between Christians and Mohammedans was very strong in those days.

However, it is to his credit that he persuaded the Viceroy to grant pardons to the two Italians who had made guns for the enemy. The Viceroy sent Varthema himself back to his son at Cannanore, to arrange for these two to be fetched from Calicut, where they still

remained. Varthema sent a spy there several times, and the two Italians made all arrangements to steal away at night, with all the jewels and money they could lay their hands upon.

However, they were betrayed to the King of Calicut by a slave who had been secretly watching them. The King did not believe his story, so he went to the Arabs, who bribed some fanatical Hindus to kill the two men.

Their homes were soon surrounded by a howling mob, and although they fought bravely the two were killed. The Indian wife of one of them managed to escape to Cannanore with her small boy. Once again Varthema showed that he was not without human feelings, for he adopted the boy and had him baptized as a Christian—but he died about a year later.

Although he was now back among Europeans, Varthema's adventures were far from over. He soon took part in a great sea-battle between the Portuguese fleet of eleven ships and over 200 Moorish vessels from all down the coast. The odds against the Portuguese were not as terrific as they seem, as less than half of the enemy ships were of any size, and even of these many were not war-ships but traders sailing in convoy.

All the same, when all these ships approached they looked, according to Varthema, like 'a very large wood'. The Admiral of the Portuguese fleet urged his men to fight bravely. Services were held on board, and then the Admiral sailed towards the enemy with two ships ahead of the main body. He went between their two largest vessels, with his guns firing, to find out the strength of the enemy.

The next day the two fleets approached one another, and the Moorish admiral asked to be allowed to pass by

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in peace. The Portuguese replied that Christians had been robbed and killed in Calicut, concluding 'Pass, if pass you can; but first know what sort of people Christians are'.

The wind freshened, and at last the battle began. In those days there was a good deal of hand-to-hand fighting at sea. One ship would go alongside an enemy, hook on with grappling irons, and send men aboard to fight her crew at close quarters. The Portuguese flagship tried to do this to the largest Moorish ship, but was beaten off three times. However, the fourth time the grappling irons held and the Portuguese poured on board. This ship was captured, and later on the Moors lost another of their biggest in the same way. Seeing this, the rest fought desperately, and some of the Portuguese vessels had as many as fifteen or sixteen of the enemy around them at the same time.

At one point, Varthema's ship was separated from the rest and surrounded; she was boarded and her crew driven aft. Things looked desperate, but 'the valiant captain called Simon Martin' fought so desperately that he killed some and drove off the rest. At this, four other Moorish ships began to come alongside, but Simon Martin seized a barrel and trained it on them as if it were a mortar, and they made off.

The Admiral then sailed into the middle of the Moorish convoy, captured seven trading ships and sank many more by gunfire. The rest of the Moorish fleet was now thrown into great confusion, and the ships fled in different directions. The Portuguese gave chase, and killed many more men in the pursuit. In the whole action the Moors lost 3,600 men, while the Portuguese had many wounded but only one killed! The Moors were a

match for the Portuguese in bravery, but not in guns, ships or seamanship.

Soon after this battle the Viceroy rewarded Varthema for his services by putting him in charge of the Portuguese warehouse. He was obviously an ideal man for the job, with his knowledge of Eastern peoples and their languages and customs. While he was at Cannanore on a mission, the ruler of that place died and was succeeded by an enemy of the Portuguese. Open war broke out and Varthema found himself besieged with two hundred men in the fort. They had no food but nuts, rice, and sugar, and had to fight their way to a well whenever they wanted water. The enemy attacked furiously, but were poorly armed and were driven off many times.

At last the Portuguese fleet commanded by the great Tristan da Cunha with his three hundred knights in white armour arrived to relieve the fort. The Moorish traders and their Indian allies asked for peace, and the Viceroy wisely granted it. The Portuguese were now much more firmly established in India, but if their enemies had not been divided among themselves they could have thrown them out with ease.

Varthema, who had now been away from Europe for five years, told the Viceroy that he would like to see his own country again. The Viceroy agreed to let him go, but asked him first to take part in an attack on a port near Calicut. The Portuguese soldiers landed from two galleys and although they were heavily outnumbered, their weapons and discipline gave them the victory. The town was captured and burned, and for his services in the battle Varthema was knighted by the Viceroy.

The fleet was now making ready for the voyage home to Portugal, and at last Varthema set sail for Europe.

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He says little about the voyage. Several ports on the coast of what is now Portuguese East Africa were visited. Here too the Portuguese were opening up trading posts, and by the same ruthless and warlike methods they used in India. Varthema, now a devout Christian again, expresses his gladness that the true faith was being spread among the heathen.

At Mozambique, an island off that part of East Africa which is still Portuguese today, the fleet remained for some time taking in stores, and Varthema, still determined to see all he could, crossed over to the mainland with some companions. They found herds of elephants roaming about, but scared them away by making bonfires of dry wood. At one point they were chased by several elephants, but managed to escape up a steep hill.

Later they met some African cave-dwellers, and their guide suggested the Portuguese should buy some cattle from them. He explained that the Africans had plenty of gold and silver, but would exchange their cattle for such things as scissors, cloth, and little bells. Varthema took off his shirt and exchanged that, and one of his companions produced a small bell and a razor. Enough articles were found to exchange for fifteen cows, which the party drove before them. But before they had gone very far, they heard a tremendous noise behind them. Expecting an attack, they were relieved to find it was only the Africans quarrelling over who should have the little bell!

At sea once more, they sailed round the Cape of Good Hope, where the ships were separated from one another by fierce storms. The only other incident before they reached Lisbon was the sight of whales, described as

'two fishes, each of which was as large as a large house'. The sailors were so alarmed at the creatures that they fired off all their guns.

At last they arrived in Lisbon, where the King received Varthema very well and confirmed the knighthood given him in India. He was kept at the Portuguese court for some days, telling stories of his adventures.

Next he went to Rome, then at the height of its magnificence, and here too he was well received. The Pope was delighted with his account of his travels, and gave him the sole right to publish it for ten years. This was probably an important matter for Varthema, as it is unlikely that he had made money by his travels. This book appeared in 1510, and was reprinted several times and translated into a number of European languages. In the dedication, Varthema declared his intention of next exploring the north of Europe, but he never did so. Even if he had, it is unlikely that his travels there would have been anything like as exciting as his five years' wanderings in the East.

CHAPTER IV

ANTHONY JENKINSON

ENGLISH TRAVELLERS as well had their share in the discovery of the East. The reign of Queen Elizabeth I was our great age of discovery, when Englishmen went all over the world in search of new lands. The best known were those who, like Drake, sailed across the Atlantic to the New World.

But equally interesting and no less adventurous were the Englishmen who first travelled to Russia. For a long time it had been the dream of English sailors and merchants—and very often in those days a man was both at the same time—to reach the East by sailing to the north of Norway and through the Arctic. In the sixteenth century a company was formed with the most romantic name of ‘The Mystery Company and Fellowship of Merchant Adventurers for the Discovery of Unknown Lands’.

In 1552 the Company fitted out at great expense an expedition with three ships to try and find this North-East Passage, as it was called. The next year they set sail, with letters from King Edward VI to the princes of the East. For a time all went well, but when they had rounded the North Cape a great storm separated the three ships. One, commanded by Sir Richard Willoughby, although damaged managed to reach the coast of Lapland. Here it was shut in by the winter ice, and Willoughby and all his crew died of cold and starvation.

Another ship was never heard of again, and the third, under the command of Richard Chancellor, reached the Norwegian coast without further misadventure. They waited several days for the others, as they had previously arranged, but then Chancellor sailed on, as he was determined to carry on the exploration on his own. As a chronicler of the time put it, 'he held on his course towards that unknown part of the world, and sailed so far that he came at last to the place where he found no night at all, but a continual light and brightness of the sun shining clearly upon the huge and mighty sea'.

Round the great Kola peninsula, across the White Sea he went, and landed at a point near where Archangel now is. The people told him that their country was called Russia, or Muscovy, and that their king's name was Ivan. Chancellor travelled inland to Moscow, where the Tsar Ivan received him well and gave him letters to take back to England, telling the King that Englishmen could safely visit Russia and trade there. Edward VI had died before Chancellor reached England again, but Queen Mary seemed keen to develop trade with Russia. She gave the Merchant Adventurers, renamed the Russia and Muscovy Company, a special charter allowing them all trading rights with Russia.

Another expedition under Richard Chancellor went to Moscow, and arranged trading terms. The Tsar sent back with them an ambassador, the first ever to represent Russia at the English court. But this time two of the ships were lost with all hands; a third was wrecked off the west coast of Scotland, with many losses, including the brave commander himself.

The Russian ambassador survived the shipwreck, and was welcomed in London with great rejoicing. After he

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had been received by the Queen, he sailed from Gravesend escorted by one Anthony Jenkinson, who was to be an important figure in the story of exploration.

Little is known of Jenkinson's previous life, but while still a youth he had been sent to the Near East to be trained as a merchant. In those days of expanding British trade, it was becoming the custom for young men to be sent abroad in this way, and Jenkinson travelled for several years in most of the countries bordering the Mediterranean.

He had become a skilful navigator and surveyor, and was a good choice for the command of this important expedition to Russia. The Muscovy Company had fitted out four ships with cargoes of woollen cloth and other materials. The little fleet left Gravesend in May 1557, and apart from minor delays reached their anchorage in the White Sea without mishap.

The Russian ambassador set off for Moscow, and Jenkinson followed as soon as he had seen to the unloading of the ships, their reloading and departure for England. The Tsar again received him well and gave him letters to help him on his travels through Russia.

In April 1558 he left Moscow with two English companions, Richard and Robert Johnson, and a Tartar interpreter. By following the rivers for some days they reached Nijni Novgorod. From this point they had to sail down the great river Volga, on the banks of which lived fierce tribes. Jenkinson needed stronger protection than the Tsar's letters, so he waited for a newly appointed governor of Astrakhan, who was on his way to take up his duties. This officer had 500 boats in his company, carrying soldiers, munitions, and stores, and Jenkinson safely reached Kazan, which he was the first

Englishman ever to visit. He gave a favourable description of it as 'a fair town', with a strong castle, situated upon a high hill. While Jenkinson was there the old wooden and earth walls were being pulled down and replaced by strong stone fortifications. It had until a few years before been an independent capital but had been conquered by the Russian armies.

After a short stay the party went on down the lower Volga through country inhabited by a fierce Tartar tribe who had recently made peace with Russia. These people, says Jenkinson, lived in tents and wandered from place to place finding fresh grazing for their cattle. They lived on meat, being especially fond of horseflesh, and drank mare's milk. They mocked at Christians for eating bread, saying that it was only fit for weaklings.

These Tartars, however, were in a bad way through war, disease, and famine, and when Jenkinson reached Astrakhan he found the town in a terrible state. Things were made much worse, according to Jenkinson, by the habit of hanging fish to dry in the streets, as this attracted enormous numbers of flies. People were dying of hunger in the streets faster than they could be buried. Parents would have sold their own children for a loaf of bread each, says Jenkinson, but he had more need of provisions than of slaves.

In those days the Tsar's rule ended at Astrakhan, and from then onward the travellers had to rely on themselves. They joined forces with some Tartars and Persians, bought and fitted out a boat, and continued their journey. The passage through the delta of the river Volga, with its twists and turns and dangerous shallows, was a test for their seamanship, but they managed it successfully. On August 10, 1558, they sailed into the

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Caspian Sea, which no Englishman had ever entered before.

In their voyage across this inland sea they had several adventures, starting off with a storm which they rode out for several days. Later, when they had anchored at the mouth of a river and most of the crew had gone ashore, they were boarded by a party of armed robbers. Fortunately for Jenkinson, who was very ill, one of the Tartars who remained on board was a holy man who had made the pilgrimage to Mecca. The robbers asked if there were any Christians aboard, and when the holy man swore that there were none, they believed him and went away.

Having sailed round the northern shore of the Caspian, and skirted the eastern side, they were overtaken by another storm. As they were not very far from their intended landing place, they went ashore and prepared for the next stage of the journey. Dangerous as their voyage had been so far, it was now much more so. Their route lay through the country of the Turkomans, wild tribesmen who lived by fighting and plundering their neighbours. Jenkinson refers to them as 'very bad and brutish people, for they ceased not daily to molest us'. When they were not attacking the travellers or stealing from them, they came to beg or to sell them horses at enormously high prices. Food and even water had to be bought from them; here again they swindled Jenkinson's party until they were glad to get rid of them by giving them what they asked.

At last the caravan with no less than a thousand camels set off across what is now Soviet Asia. Soon they came into lands of a prince called Timur, whose people stopped and plundered the caravan. Jenkinson was so

furious that he rode off to the prince to complain and to ask for permission to travel through his country without being molested. The prince received Jenkinson well, feasted him, and sent him off with a letter permitting him to travel, and a horse worth about half as much as the goods his men had stolen. It was a good thing for Jenkinson that he did visit the prince, for if he had not it is most likely that he would have been robbed of all he possessed.

Jenkinson caught up with the caravan and they spent twenty days crossing the desert. Their food began to run short and they had to kill a camel and a horse for food. They were short of water, too, when they came to what Jenkinson took for an inlet of the Caspian Sea. In reality it was a lake, and the travellers were very glad to find it contained sweet water.

A few days' journey further on, the caravan reached the capital of another King, who also treated them well. To him Jenkinson gave letters from the Tsar, as well as a handsome present. A feast was prepared, as usual of horseflesh and mare's milk, and the next day Jenkinson was sent for again. The King asked him many questions about the Tsar as well as about England. It is worth remembering that this adventurous English traveller was the first visitor the ruler of this remote Tartar tribe had ever had from the Russian court.

The next stop was at an ancient city called Urgendj, which Jenkinson found already in ruins because of constant civil wars. It had been besieged four times in seven years, and had lost nearly all its trade. Nevertheless, the party remained there for a month, and Jenkinson has a good deal to say of the habits of the Tartar tribes of this part of Turkestan. The King had five brothers, who were

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always fighting among themselves, and whenever one was defeated, he would go into the desert with his men and live by plundering passing caravans.

All the tribesmen lived a wandering life with their herds of cattle, as well as camels, horses and sheep. They were fond of training hawks, which they used in hunting wild horses; the hawks would land on the horses and worry them until they were tired out, when the hunter would kill them with a sword or bow and arrow. These people ate their meals sitting cross legged on the ground, and lived 'most idly, sitting round in great companies in the fields'.

From Urgendj the journey led Jenkinson along 100 miles of the dry bed of the great river Oxus which had changed its course. At the next town, the ruler would have robbed the party of all they had, but for his fear of his brother, the King of Urgendj, who had given them permission to travel safely through the country. As it was, the travellers escaped by giving this King a handsome present.

Not long after, the caravan had halted for the night when the sentries caught four armed horsemen. This part of the desert was infested by robbers, and the party were now on their guard, especially when the captured spies, for such they were, confessed that a band of men was waiting ahead of them to ambush the caravan. Fortunately, the prudent Jenkinson had asked the local chief to provide an escort, so there were eighty armed men guarding the caravan. This escort was not an unmixed blessing, as Jenkinson notes that they ate a great deal of the party's store of food. Not only this, but when the caravan was in danger of being attacked, the precious escort asked how much the travellers would give them

not to desert. They refused what was offered and demanded more, then went off leaving the travellers to defend themselves. This they did very well when the attack came. The sides were evenly matched, the robbers being better armed, except for the three Englishmen with their firearms. These last decided the battle, after three days' fighting, and the robbers were glad to make peace.

That night the caravan reached the river Oxus, where they refreshed themselves and feasted on the horses and camels which had been killed in the battle. After another narrow escape from a band of robbers, the party reached Bokhara on December 23, 1558, 300 years after Marco Polo. It was still a great city, but had lost some of its importance through wars and invasions. Jenkinson tells how caravans still came in from all parts of the East bringing silk, cotton and other cloth, horses and many slaves.

There had been great changes in those 300 years. Marco Polo had been able to continue his journey to China through the kingdom of the 'great Khan' who encouraged visitors from the West. Now, between Bokhara and Cathay, there were innumerable warlike princes who would have given Jenkinson a very different welcome from that which Marco Polo had received. So Jenkinson sensibly decided, after several months in Bokhara, to return by the way he had come. During his stay in the city he had several interviews with the King, Abdullah Khan, who from other accounts appears to have been a good and powerful ruler. Jenkinson, however, was not altogether fortunate in his dealings with Abdullah, who went off to the wars without paying him what he owed.

In spite of this loss, Jenkinson considered himself

lucky to leave Bokhara in safety. A few days after his caravan of 600 camels had departed, the city was besieged by a neighbouring king. Jenkinson was escorted by a hundred gunners, and made a comparatively uneventful return journey to Moscow, which he reached nearly a year and a half after he had set out.

He was received by the Tsar to whom he presented a Tartar drum and the tail of a yak, as well as twenty-five Russian slaves whose freedom he had obtained. The Tsar asked Jenkinson to dinner, and showed great interest in his stories of his travels.

After nearly six months in Moscow, mainly spent in the affairs of the Company, he asked permission to return to England. On his return home, although the Merchant Adventurers were naturally pleased with his work in furthering trade with Russia, he does not seem to have been treated with particular honour. In fact, considering that he had penetrated many hundreds of miles into completely unknown lands, and had done his country great service in opening trade with Russia, he does not seem to have been treated as well as he deserved.

However, the Company or Society sent him in 1561, a year after his return, to open up trade with Persia. First of all he went to Moscow to ask the Tsar for permission to travel through his dominions to Persia. After several setbacks, this was granted, and the Tsar also gave Jenkinson several secret missions to carry out. Jenkinson does not say what these were, but he seems to have carried them out successfully, as the Tsar gave special privileges to the English as a sign of his gratitude.

Jenkinson reached Astrakhan and once again set sail on the Caspian Sea, this time on a southerly course. He

had an escort of two ships with fifty gunners aboard as a protection against pirates. Only a few years before, an English merchant on his way back from Persia had been attacked in the Caspian and had lost most of his goods. The travellers went a long way off their course in their anxiety to avoid a similar fate, but only to run into another danger. Jenkinson's ship ran upon a sandbank out of sight of the coast, and was only got off with difficulty. Soon after this escape, they were overtaken by a fierce storm, and had to ride it out at anchor for several days. They lost one anchor, and the ship began to leak badly. However, the crew kept her afloat by pumping, and the remaining anchor held.

The rest of the voyage was uneventful, and Jenkinson landed at a city called Derbend, about halfway down the eastern shore of the Caspian. No Englishman had ever been here before, and Jenkinson describes it as a very ancient city with a castle and wall built by Alexander the Great. It was situated between the Caucasus Mountains and the sea, and was ruled by the Shah of Persia. From Derbend they sailed eighty miles further to a place Jenkinson calls Shabran, where he landed his cargo. News came from the local King that Jenkinson might visit his court, and the party set off with horses and camels. The King kept great state in 'a rich pavilion wrought with silk and gold placed very pleasantly'. He and his courtiers sat crosslegged on the ground, but seeing that this was painful to Jenkinson, he ordered a stool to be brought. He entertained him to an elaborate banquet, and then asked him many questions about the countries of Europe. He was dismissed with the promise of men to take him to the Shah; so far his journey had been perfectly successful, and it seemed likely that he

would be able to carry out his main object in establishing trade between Britain and Persia.

But it was not to be so. On arrival at the Shah's court, Jenkinson was kept waiting for some days, as a peace treaty was just being concluded between Persia and Turkey. Turkish merchants were able to persuade the Shah to give the trade to them as fellow Mohammedans, rather than to the English. So when Jenkinson at last was received by the Shah, he asked him many questions about his religion, and dismissed him as an 'unbeliever'. A man with a basin of sand followed him as he left the palace, spreading it where he had trodden.

The son of the King who had received him so well was at the court and did his best for Jenkinson. If he had not, he might well have been imprisoned or worse; as it was, he was dismissed with a present, but with no trade agreements.

On his way home he visited Abdullah Khan who gave him promises of trade. Without misadventure he reached Moscow with presents of jewels and silks for the Tsar. He planned further expeditions to Persia but although on one of them he was successful in obtaining trade agreements from the Shah, the trade never came to anything.

Jenkinson himself returned to England in 1564, over three years after he had left. He was very well thought of in England, not surprisingly, for he had served the Muscovy Company—and English trade—very well. Two years later he was sent back to Russia, for the Company was worried at the success of an Italian rival. Once again Jenkinson was successful, and the Tsar forbade everybody but the Muscovy Company to trade in the White Sea ports.

In 1566 Jenkinson made a third voyage to Russia, but

he only left a very brief account of it. Edward Webbe, a boy of only twelve years of age, was one of those who accompanied him, as his personal attendant, and afterwards left some account of the voyage. Five years later, when relations with Russia were not very good, Jenkinson was sent again to try and regain the Tsar's good graces. On landing he was told that the Tsar had refused to have him in his territories, but he boldly went on and eventually succeeded. This was perhaps his greatest success—he had undertaken a very difficult task, which nobody else could possibly have done, and had succeeded.

In his own words, 'being weary and growing old, I am content to take my rest in mine own house, chiefly comforting myself in that my service hath been honourably accepted and rewarded of her Majesty and the rest by whom I have been employed'. The rest of his life was quiet and prosperous; he bought an estate in Northamptonshire and divided his time between it and his house in London. He died in 1610.

He had been the first to describe eastern parts of Russia which had only recently been annexed by the Tsar; the first to go down the Volga since it had become Russian throughout; the first Englishman to sail the Caspian and to find out that it was really a landlocked sea. He made mistakes, of course, particularly when he wrote of the rivers of Central Asia.

His descriptions were published in all the best collections of travels, and greatly influenced geography in the sixteenth and seventeenth centuries. Jenkinson's travels bridge the long gap between Marco Polo and the English and Russians who explored Central Asia in more recent times.

CHAPTER V

THE DUTCH TAKE A HAND

THE SUCCESS of English trade with Russia was soon noticed by another nation whose trade was on the increase. The Dutch were not long before they set up as our rivals in the Far North and in 1565, only eight years after Jenkinson had started on his first voyage, they sent an expedition to start a rival trading post in Archangel. In spite of opposition from the English, who had him arrested and imprisoned as a spy, Oliver Brunel, the leader, managed to get Dutch trade started.

However, Brunel's real interest was in finding the North-East Passage. We have already seen that it was the Merchant Adventurers' attempts to do this which had led the English to Russia. Since then other Englishmen had tried, but had not got very far.

Brunel's chance came. In 1584 he was put in charge of an expedition, and sailed eastwards from Archangel, trading as he went. But the ice stopped him at the strait to the south of Novaya Zemlya, and he had to return.

Worse was to come. His ship went aground on a sandbank and he lost his valuable cargo of furs and Russian glass. Although the Dutch had not enough money at the time to fit out another expedition, Brunel had given them a start in the Arctic.

Ten years later three Dutch ships sailed for the Arctic. One of them was commanded by the great Willem Barents, one of the finest navigators of his day. Barents.

made for the north of Novaya Zemlya, the great island which lay in the way, while the other two ships followed Brunel's course and managed to get through the strait into the Kara Sea. As for Barents, he made his way some distance into the open sea by the other route before he was forced to turn back.

Now that it had been shown to be possible to enter the Kara Sea, the Dutch followed up their success by sending seven ships the next year, with Barents as chief pilot. This expedition was a complete failure, as the entrance to the strait was bristling with ice 'most frightful to behold'.

The Dutch Government now lost interest in the North-East Passage, and would provide no more money. But Barents was determined to try again, and he persuaded the merchants of Amsterdam to fit out two ships. These sailed in 1596, with Barents as chief pilot, but not in command of a ship.

After nearly a month at sea, far beyond the north of Norway, a lookout reported that he saw white swans, but on looking closer, he found it to be ice which had broken off the main icebergs. A few days later they sighted an island where they killed a polar bear. In memory of this adventure they named the island Bear Island, the name it has to this day. Holding on their course they reached a much larger island, which Barents thought was a part of Greenland. It was in fact Spitsbergen which they had discovered.

They went ashore and found a great number of geese 'such as come into Holland', sitting on their nests, killed one with a stone, and collected many eggs. Through continuous fog and drizzle they reached the north-west tip of Spitsbergen and found their way

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blocked by heavy ice. There had already been disagreement between Barents and one of the captains about the course to steer, and now the two ships parted. One returned home, and Barents sailed for Novaya Zemlya to have another try at sailing round the north of it.

Time after time they were stopped by great icebergs, and at last it seemed likely that they would be shut in by the ice for the whole winter. The men had been cutting and pushing to try and force a passage, but in vain. At one point they nearly lost three men, when the ship began to move, and the ice on which the sailors were standing began to move too. Fortunately, though, all three were able to catch hold of the rigging as the ship drove past, and they dragged themselves on board.

The explorers were now in a most serious plight. Their ship was hemmed in by the ice, and it looked as if there would be nothing for it but to spend the winter on the bleak coast of Novaya Zemlya. They had managed to find a small bay on the north-east coast, but it gave little shelter.

Their position was to get even worse. A gale drove the ice against the ship's bows with tremendous force, so that they were forced up four feet higher than the stern. It looked as if the ship would capsize, but the following day the crew managed to clear a good deal of the ice away, so that she was on an even keel once more.

But the ice began to drive against her with even greater force: the whole ship was lifted up, and 'all that was both about and in it began to crack, so that it seemed to burst in a hundred pieces, which was most fearful both to see and hear, and made all the hair of our heads to rise upright with fear'.

A few days' fine weather gave them hope of getting free, but the ice closed in again, this time for good. They were to be the first Europeans to spend a winter in the Far North; and they were in a poorly sheltered inlet called Ice Haven on the north-east coast of Novaya Zemlya.

When it became clear that there was no escape, the party decided to build a hut ashore. Fortunately they found a good supply of driftwood, enough to provide them with fires all the winter, as well as shelter. Their carpenter died while the work was going on, but they kept at it, in spite of the terribly severe cold. Gerrit de Veer, who told the story of the expedition, wrote, 'It froze so hard that as we put a nail in our mouths, there would ice hang thereon when we took it out again, and made the blood follow'. To make matters worse, they were constantly interrupted by bears while they were working, and many times had to run for their lives.

However, after a month they were ready to move into a house 32 feet by 20. They had a lamp which kept alight with melted bear fat, a clock and a bathtub made from an empty wine cask. When they washed their clothes, they froze so stiff, that even when laid in front of a roaring fire, only the side nearer the fire thawed out, while the rest remained as hard as a board.

Soon the long dark winter days were upon them. It was so dark and so cold that they felt they would never be warm again in their lives. Although they hardly went out of doors, they were plagued by hundreds of foxes, which scattered their wood piles, and even ran all over the roof and poked their snouts down the chimney. To catch these animals they laid traps, and when they

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caught one, they not only had fresh meat but fur out of which they made warm caps.

The chimney began to smoke badly, so they were afraid to bank the fire up, and 'it froze so sore within the house, that the walls and roof thereof were frozen two fingers thick with ice, and also in our cabins where we lay'. Even the clock was frozen, and would not go, so they had to rely on an hour-glass to tell the time. It was dark all the time, so that they could not tell the difference between day and night.

It did not seem as if anything could increase their misery, but a great storm brought with it a piercing north-east wind, which found its way in through the chimney and the cracks in the doors. They considered what they should do if they were not to die of cold, and one of the party suggested that they burn some coal which they had brought from their ship. After building a roaring fire, they were so delighted at feeling warm again that they stopped up the doors and the chimney to keep the heat in, and all went to bed. They lay talking for a long while, and then felt a sudden dizziness in their heads. Those who were still able rushed and opened the doors and unstopped the chimney. The cold air soon brought them round, but they had all had a very narrow escape from death by carbon monoxide poisoning. After that they used no more coal, and had to keep as warm as they could with their smoky wood fires.

The end of the year was now near, and they began to long for the time when the winter would be over. The cold was severer than ever, and they used heated stones as hot-water bottles, as they lay in their bunks. 'Notwithstanding all this, in the morning our cabins were frozen white, which made us behold one another with

sad countenance.' As they sat by the fire, they could only keep warm in front, and their backs were white with frost.

So, 'with great cold, danger and disease', they began the year 1597. To cheer themselves, they began to serve out a small measure of wine every other day, hoping this way that it would last out the winter. At Twelfth Night, they even had a party, with biscuits and pancakes, as well as some of the wine. It was a brave effort, and helped to carry them through the last weeks of that terrible winter.

At last the weather began to improve, and they were able to get out to stretch their legs. About noon a faint glow began to appear in the sky, as a sign that the longed-for sun would soon appear. And then, one wonderful day at the end of January, two of them caught a glimpse of 'the edge of the sun'. They went back to the hut to tell the great news, but the others would not believe them.

The next day, one of the party, who had been ill for some time, died, and the others dug his grave. Afterwards, they were discussing what to do if the hut should be completely snowed up, and the captain suggested that it might be possible to climb out through the chimney. He clambered up to try it, and one of the others went outside to watch him appear. He saw a much more remarkable sight, for there, just above the horizon, was the sun.

After that it appeared every day for a slightly longer time, and was the best possible tonic for men who had been shut up in the darkness for so long. They began to take regular walks, although they found at first they were very weak. In February they killed a bear, which

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gave them a much-needed supply of fat for their lamps. As the weather improved, so did their health and spirits, and they 'made a staff to play at golf, thereby to stretch our joints'.

Several times they had narrow escapes from bears. One night a bear prowled round the hut, and they could not shoot it, as their gunpowder was damp. It came up to the door, which in their haste they had not been able to bar. Fortunately, it did not try to break in, but gave them a terrifying night, wandering round the hut and trying to get in through the chimney. But 'at last she went away and left us'.

They were now beginning to think of their journey home, and a small party went aboard the ship, to find out whether she was still seaworthy. She had been sadly battered, and was very much hemmed in by the ice, which was piled up 'in such manner as if there had been whole towns made of ice, with towers and bulwarks round about them'.

There was now a further cause for worry, as the food was beginning to run out. The last small barrel of salt pork was carefully rationed, so that it would last as long as possible. The supply of wood was almost used up, and they had to break down the porch outside the hut and burn that. They were now preparing for the voyage home, making and repairing sails for their two boats, and fetching gear from the ship, which was altogether unfit for use. One boat they found hidden deep under the snow, and when they had dug it out, they were distressed to find themselves still too weak to drag it to the hut.

However, they managed at last, and set to work to make it more seaworthy by heightening the gunwales,

using timber from the hut. In spite of constant interruptions from bears, they worked on steadily, and at last the boats were ready for sea.

Willem Barents, the great navigator to whom the whole party owed so much, had been a very sick man for a great part of the winter. Now that the time had come to set off homewards, he knew that he was dying—but he made no complaint and continued encouraging his men as he had done all along.

Before they left, he wrote three copies of a letter which told the story of the endurance and suffering of the whole party. One copy was left in the hut, and one was put aboard each boat. When this had been done, everyone went aboard.

This day, June 13, the weather was fine, and they were carried through the open water by a good breeze. The following day they ran into thick ice, but managed to get through. As they rounded the northern cape of Novaya Zemlya, Barents asked to be lifted up, so that he could see that headland again before he died.

The breeze now freshened to a gale, breaking up the ice and sending great chunks crashing against the boats. To save themselves, they all got their vessels up on to the ice and camped there for several days. During this time, Barents died, to the great grief of all his companions. They were now in a terrible plight, in two open boats, without a navigator, and with hundreds of miles of sea to cross even when they got clear of the ice.

It was a slow and painful journey. On they went, often held up by ice and by contrary winds, sailing when they could and rowing when they could not sail.

At one point they had taken their boats on to the ice again for safety, when it began to break up. As they ran

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from place to place trying to save their goods, which were falling into the water, cracks were appearing all the time under their feet. They managed to save a greater part, at the risk of drowning, but some precious food and wine was lost, and one boat badly damaged.

To add to their troubles, the lack of fresh food began to give them scurvy. Fortunately, they were able to find a kind of grass which they ate and which cured them. At last they were nearing the Russian coast and for the first time for over a year met some of their fellow-men, the crews of two Russian ships they had met on the outward voyage. The Russians treated them kindly, giving them what food they had.

Food had run very short, four ounces of bread a day, with a little water, being all they had, and 'hunger was a sharp sword which we could hardly endure any longer'.

The wind was against them, and they were too weak to row very far. When they were almost at their last gasp, they saw a Russian boat sailing towards them and were able to buy some fish. Another Russian vessel was able to supply them with more food, and they had a meal of flour and water with bacon fat and honey in it. It sounds horrible, but the starving sailors thought it 'tasted exceeding well!' The two boats were separated for a few days, but met again further along the coast.

There were now a few houses along the shore, where Russian fishermen lived, and the travellers were able to buy food regularly. At one of these places they told their story, and mentioned that they were hoping to find a ship which would take them back to Holland. The Russians told them that there were three ships at the nearby port of Kola, two of which were preparing to sail. It was arranged for a Laplander to guide one of the

Dutchmen to the ships, while the rest waited eagerly for the news he would bring back.

When he came, he brought a letter written as if the writer knew them, and saying that he was delighted to hear that they were safe, that he had given them up for lost, and that he would come for them soon. Most astonishing of all, the letter was signed 'John Cornelison Rijk', the same name as the captain of the ship which had left Holland with them so long before, and had been separated from them in the storm. For some time they could not believe that it could be the same man, but when they compared the handwriting with some they had before from him they found it was none other.

While they were still amazed, they saw the man himself approaching in a Russian boat, 'who being landed, we received and welcomed each other with great joy and exceeding gladness, as if either of us on both sides had seen each other rise from death to life again'.

At the port of Kola they were received with astonishment, especially when the two open boats were seen, in which they had made their adventurous journey of 1,600 miles. The boats themselves were left there 'for a remembrance of our long, far and never before sailed way'.

After thanking the Russians for their hospitality, the explorers sailed for home, and reached Amsterdam at the beginning of November, 1597. In their white fur caps and the same clothes they had worn during their perilous winter in the Arctic they were received as a great wonder, and the people of Amsterdam never tired of hearing the story of their adventures.

There is a remarkable sequel to this story. Ice Haven, where the Dutchmen spent that eventful winter, was not

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visited again for nearly three hundred years. Then, in 1871, a Norwegian whaling ship put in there and, going ashore, the Norwegians found the hut almost exactly as Barents and the others had left it. It had been sealed up by ice, and inside were the books, the cooking utensils, the clock—and the letter Barents had left in the chimney. Many of these things can still be seen in the National Museum at Amsterdam.

CHAPTER VI

VITUS BERING

BY NOW you may be wondering what the Russians had been doing about exploring to the north and east of their own country. Jenkinson, Barents, and other foreigners were not the whole story. For a long period, in fact since mediaeval times, Russians themselves had been moving eastward, exploring and colonizing.

In those days of course there was no Russia as we know it, but only a number of kingdoms often at war with one another. First one, then another, took the lead. In the sixteenth century Moscow, under Ivan the Terrible, became the most powerful, and Ivan's power spread eastwards. The town of Tobolsk was founded, and from it began the great advance to the east which is one of the most extraordinary stories in the history of exploration. In less than a hundred years Russian power and influence were to spread all the way to the Pacific ocean, carried by men most of whose names have been lost.

When Peter the Great became ruler of Russia, he began to take a great interest in the exploration of his eastern dominions. He sent Swedish prisoners of war to Siberian ports to teach his people ship-building, navigation, and map-making. In the early years of the eighteenth century, Kamchatka and the Kuril Islands at the eastern tip of Siberia were explored. These discoveries interested the geographers of Western Europe, and when Peter was among them during his travels in 1716

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and 1717, they persuaded him to try and settle the question whether Asia was joined to America.

When he returned to Russia in 1718 Peter sent two of his naval officers on a voyage to try to solve this problem which had been puzzling geographers for so long. They were not successful, but in 1724 Peter decided to try again. This time a Dane called Vitus Bering, who had reached the rank of Captain in the Russian Navy, was chosen to lead the expedition. Peter the Great died in 1725, but the voyage was not delayed on that account.

Bering's orders were to 'build in Kamchatka or in some other place in that region one or two decked boats', to sail north in them along that shore 'which seems to be a part of America', and to find out all he could about it. The transporting of supplies across Russia and Siberia and the building of the ships took a long time, and it was the summer of 1728 before Bering was ready to put to sea.

After three weeks at sea, when they were well on their way towards the extreme north-eastern point of Asia, some of the local people called Chukchi rowed out from the shore to them and asked who they were and where they came from. These Chukchi told Bering that a short distance ahead the land turned westward. A week later Bering came to the place where the land turned westward—East Cape, the extreme north-eastern point of Asia. As he could find no land to the north, he felt that he had proved that Asia was not joined to America, so he turned back.

When he returned to Russia, Bering made his report to the Empress, Peter the Great's widow, but some people did not believe the case was really proved. Bering

himself wanted another chance, but there was at first some disagreement about whether the expedition should be sent by land or sea. Transporting stores right across Russia and then building ships took a long time, as Bering had already found, and it was felt that sea travel all the way would be much quicker. However, in the end, Bering was ordered to go by land to Kamchatka as before.

Every kind of difficulty and delay seemed to hold up the preparations. Bering was held responsible, and the Admiralty cut his pay by half for over two years. He was in his late fifties, and by the time the ships were ready he was so worn out and discouraged that he was hardly fit for a voyage of discovery.

However, at last all was ready, and in June 1740 the two ships were launched and named the *St Peter* and the *St Paul*. By early October they were in the new Harbour of St Peter and St Paul (Petropavlovsk), which was named after them. Here, near the southern point of Kamchatka, they spent the winter before starting on their great voyage. This time Bering's orders were to find out if there were any islands or other land to the east of Kamchatka, and to sail eastward until he reached the American coast. Fortunately for the expedition as a whole, Bering persuaded a German doctor and scientist called Steller to accompany him. Apart from his quarrelsome disposition, Steller turned out to be a most useful member of the expedition, and wrote an excellent account of the voyage.

At last, early in June 1741, the two ships set sail. They were only a few days out, and still searching for land, when they were separated in bad weather and never saw one another again throughout the voyage. Steller was in

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Bering's ship, the *St Peter*, and soon began to fall out with the officers over the position of the land they were looking for. Bering gave up looking for the *St Paul* after a time, and changed to a north-easterly course which he felt would bring him to the American coast. Steller himself reported land on July 15, but the naval officers did not believe him; in fact, he complained that their answer to anything he said was 'You do not understand it; you are not a seaman'.

However, three days later land was officially sighted, and it turned out to be a long wooded island, with more land at its eastern end. Steller landed on the island, which is now known as Kayak Island, while the ship was taking on fresh water. He found remains of food, but the people had evidently taken fright, and hidden themselves inland. Later he found a storehouse full of dried salmon and other provisions, and took various things away with him.

There seems to have been considerable justice in Steller's criticisms of the naval officers, for they had no clear idea of what to do now that they had found the American coast. They did not attempt to land on the mainland but followed it to the west in rather a haphazard fashion, along the Alaska Peninsula. On reaching the Shumagin Islands, they landed to take in water. Here one of the sailors, a man called Shumagin, died, and the islands were named after him. It was here that they met for the first time the natives of the region, who came off in boats to meet them, talking and shouting all the while. Steller and some others went ashore with them and were treated in a very friendly manner, although neither side could understand a word the other said. Owing to a misunderstanding, though, the sailors

fired over the heads of the islanders and had to retreat hastily.

Further on they met another party of islanders, and once again found them friendly. They were strong and stocky, of medium height, with brownish skins and flat features, and black hair hanging straight down. Their clothes were made of sealskin or whale-gut, and some of them had a piece of bone stuck through the nose or chin.

While they were sailing westward, the ship often ran into bad weather. Storms were bad enough, but the thick fogs they encountered were even worse, as they were making their way along an unknown coast with many islands. Food and water were getting short and some of the men were suffering from scurvy. Quarrels between Steller and the naval officers were always breaking out, and Bering himself does not seem to have been well enough to keep control over his subordinates.

At the end of September the *St Peter* ran into violent storms. Steller wrote of one of them: 'Every now and then we could hear the wind rush as if out of a narrow passage, with such terrible whistling, raging and blustering that we were every minute in danger of losing masts or rudder or else of seeing the vessel itself damaged by the force of the waves, which pounded it as when cannons are fired, so that we were expecting every moment the last stroke and death.' Even the pilot, Steller added, could not remember anything like it in his fifty years at sea!

It was impossible to cook any food, and those who were well enough to eat at all had to live on biscuits until the weather abated. When it was calm again, two of the crew were dead and twenty-four more were ill.

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There were no longer enough able-bodied men to handle the sails, so it was suggested to Bering that they should spend the winter on the American mainland. The Captain, although very ill with scurvy, disagreed with this idea and they continued to try and reach Kamchatka.

At last, at the beginning of November, land was sighted which the officers thought was Kamchatka. As they approached the shore, the officers were down below asleep instead of being on watch, and the ship was in great danger of running aground. However, by luck rather than seamanship, they managed to anchor in a small harbour. Steller and several others went ashore and shot a number of birds which were good to eat. They built a hut out of driftwood and moved some of the sick men into it. Steller was very doubtful that they had reached Kamchatka, and in fact it turned out that they were on an undiscovered island to the east of it, now known as Bering Island. The animals, especially the blue foxes, were so tame that it looked as if the island was completely uninhabited. The first evening ashore, a fox came up and stole their food while they were sitting round the camp fire, and all the time they were on the island, these creatures were a great annoyance. They would break into the store and carry off meat, and even attack the sick men who were too weak to fight them off.

The first hut was made larger by digging trenches and putting wood over the top, and altogether there were three of these wretched coverings in which the party settled down to pass the winter. Steller soon noticed that sealskins, which would have been very valuable in Russia, were simply left for the foxes to gnaw. On the

other hand, everyday things like axes, twine and needles and thread began to be looked on as treasures.

It was soon realized too that 'rank, learning and other distinctions' counted for nothing in this Arctic waste, and that if they were to survive officers, scientists and ordinary sailors would all have to work together. As so often happens, the fact that they were all sharing the same misfortunes made them get on much better together than during the earlier part of the expedition.

Owing to the lack of space, the sick men had to lie huddled on the ground inside the huts, covered with rags and clothing. There was considerable danger that the *St Peter*, still at anchor in the bay, would be driven out to sea, as all the crew were now living ashore. Those who were well enough used to go out to take off all the supplies they could manage. However, at the end of November, the ship was thrown on to the beach in a storm and remained there quite safely.

A number of men died soon after landing, including the most experienced seaman of all, the seventy-year-old pilot. Early in December, Bering himself died. Steller thought highly of him, although he blamed him for being too lenient with inefficient officers. Even throughout his illness, Bering had continued to encourage his men in every possible way.

By Christmas, things had improved somewhat. There were now five 'underground dwellings', as Steller called them. A number of sick men had died, but the rest had made a complete recovery. There was no lack of fresh meat, although as the animals became more timid, the huntsmen had to go further afield. Bread was kept as a luxury, and biscuits were made from the flour brought from the ship. Unfortunately the flour had become

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mixed with sea-water and gunpowder in the ship's hold, so it tasted particularly horrible!

A good deal of time was spent in exploring and hunting trips. Several times small parties had narrow escapes through being caught in sudden snowstorms. It was now quite certain that they were on an island, and as the *St Peter* had been driven so far up the beach that she could not be refloated, the only way the explorers could get away was by building another ship.

They set to work to do this, using the timbers of the *St Peter*. It was now spring, and quite a number of edible plants were found, which helped out the food supplies very much. Work on the ship went on all the summer, and by early August everything was ready. The ship was launched and christened the *St Peter* like her predecessor.

She was very small, and when everyone was aboard 'we were lying one on the other and crawled over each other'. A good deal of bedding and clothing had to be thrown overboard to make more room, but the quarters were still very cramped. On the second day the ship began to fill with water from a leak which could not be found. To make things worse, the pumps became clogged; but after some cannon balls had been thrown overboard to lighten the ship, the carpenter managed to find and repair the leak. Soon afterwards the coast of Kamchatka was sighted; ten days later, on August 27, 1742, they were in the harbour of Petropavlovsk, where they had been long given up as lost. Of the 77 men who started out, 32 including Bering himself, had died since the beginning of the voyage.

They found that the *St Paul*, from which they had been separated so early in the voyage, had returned

nearly a year earlier. The two ships must have been within a day's sail of one another on a number of occasions, as they had followed the same general course for quite a long time. Then Captain Chirikov took the *St Paul* down to the southernmost point of the Alaskan coast. Here he sent an officer and ten armed men ashore to reconnoitre; when they did not return he sent a boatswain and three men to help repair their boat, which he thought must have been damaged. When the second boat did not return, Chirikov became seriously alarmed. He had no more boats, so he could not find out what had happened. All he could do was to keep an anxious lookout for the missing men, but it was no good—they were never seen again. On the following day, two native boats put out from the bay where the missing men had landed. They could not be persuaded to come near the ship, and soon went back into the bay. Chirikov was now sure that his men had either been killed or captured. He had lost fifteen of his ship's company, and was in the appalling position of being able to do nothing about it. He called a meeting of his officers, and it was decided to return at once to Kamchatka. Food and water ran very low on the return journey and the lack of boats made it impossible to get more. Nearly everyone went down with scurvy, and only a few were able to drag themselves on deck. Chirikov himself was so ill that he had to be carried ashore at Petropavlovsk, and he never fully recovered his health.

The expedition, which had cost so many lives, had shown that Asia and America were not joined together; it had found out a good deal about the coast of Alaska and the islands, and thanks to Steller, had gathered much knowledge of the geology and natural history of

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all the places visited. As for poor Bering, he would undoubtedly have commanded the expedition more efficiently if his health had allowed, but at least he had the satisfaction of carrying out his object. His name still lives in the sea and the strait between Asia and America, both of which were named after him, as well as the lonely island where he lies buried.

CHAPTER VII

CAPTAIN COOK'S VOYAGES IN THE SOUTH PACIFIC

CAPTAIN COOK was not only one of Britain's greatest explorers; his life was a remarkable example of what is nowadays called a 'success story'. He was born in a very poor cottage in the North Riding of Yorkshire where his father was a farm labourer. In those days it was even more difficult than now for a poor boy to become an officer in the Royal Navy, and yet Cook through sheer ability rose from Able Seaman to Captain.

What schooling he had finished very early, and after a short spell helping his father on the land and an even shorter period as a shop assistant, young James was apprenticed to a Yorkshire shipping firm. In their service he became mate of one of their colliers and learned seamanship and navigation.

When he was twenty-seven, war broke out between England and France. Cook's ship was lying in the Thames at the time, and he volunteered for service in the Navy, having, as he said, 'a mind to try his fortune that way'. He was fortunate in his first captain, Sir Hugh Palliser, who recognized Cook's remarkable ability and gave him a great deal of encouragement.

Cook's main job during the war was making charts of the St Lawrence, and during General Wolfe's famous landing at Quebec he was in charge of some of the boats

which took the soldiers ashore. When the war was over and Canada had been won from the French, he spent some time in charting the coasts of Newfoundland. His work convinced his superiors in the Navy of his outstanding ability, but he was still quite unknown outside the Service.

But his chance of fame was soon to come. In the year 1769 the planet Venus was due to pass across the sun, and it was thought that it would be possible to work out the distance of the earth from the sun by taking observations of this eclipse. The Admiralty agreed to send a ship to Tahiti, in the South Pacific, where the eclipse could best be seen, and Cook was given the command. At his suggestion a Whitby collier (of the type he had first sailed in) was taken over by the Navy and specially fitted out for the expedition.

But all this seems to have little to do with exploration, and in reality Cook's voyage had another purpose as well as that already mentioned. It had always been believed that there was a great undiscovered land somewhere in the South Pacific, and many attempts had been made to find it, especially in the years just before Cook sailed. The French in particular were trying to discover this land to replace their lost empire in Canada, and once again they were in rivalry with ourselves.

Cook was given secret instructions to go on searching for this unknown land after he had carried out the observations of the eclipse. There was a vast area to be covered, as hardly any of the South Pacific had been explored. Apart from a few islands like the recently discovered Tahiti, parts of Tasmania and New Zealand and of Australia itself (the west coast of which had actually been discovered and named New Holland,

though nobody knew it was in fact the Southern Continent), this great ocean was quite unknown.

Cook's ship, the *Endeavour*, reached Tahiti and carried out her first task. The three months or so they spent there in this unspoilt island were very pleasant—the natives were friendly, although they had a tendency to steal anything they were able to lay their hands upon. Apart from this, they were an attractive race, tall, well-built, brown-skinned people, very skilled in sailing their canoes. A number of them wished to go away in Cook's ship, and one chief, called Tupia, actually did so.

After a month spent in charting the Society Islands, the expedition now sailed south to carry out the secret part of its orders. At length land was sighted, which proved to be the North Island of New Zealand. They anchored in a bay and went ashore. The warlike Maoris received them very differently from the Tahitians. There were several attacks, in which a number of Maoris were killed before they were beaten off. Friendlier people were met at the next anchorage, and Tupia, the chief from Tahiti, became very useful as an interpreter. The Maoris themselves had come to New Zealand from the South Sea Islands, and were perfectly able to understand the language of Tahiti.

Captain Cook soon had a chance of visiting a Maori village, which had been built on a headland and strongly fortified for defence. He remarked that it could have been defended by the brave inhabitants against a very much larger number of attackers.

In each new place the Maoris usually came out to the ship in their largest canoe, sometimes as many as a hundred of them, armed and wearing their best clothes. Usually they would attack with stones and darts, until

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Cook was forced to give the order to open fire. This was always done with as little harm as possible, and as soon as the inhabitants found that the English did not wish to harm them, they became friendly.

Wherever he went, Captain Cook made very careful notes about the country and the people. The Maoris he described as 'a strong, raw-boned, well-made active people, rather above than under the common size, especially the men; they are of a very dark brown colour, with black hair, thin black beards, and white teeth, and such as do not disfigure their faces by tattooing, etc., have in general very good features'. Like the Tahitians, they were very good at making and sailing canoes. Apart from fish and some fruits, they ate wild fowl and dogs. Cook found a good deal of evidence that they were cannibals.

By sailing right round New Zealand, he found that it consisted of two islands and was not a part of the unknown continent he was seeking. With his usual accuracy and thoroughness he made charts, which a French naval officer who visited New Zealand two years later found to be correct in almost every detail.

If Cook had not discovered the Southern Continent, he had already narrowed the area of sea in which it could possibly lie. On leaving New Zealand, he decided to return home via New Holland, which was the name for that part of the western coast of Australia which had already been discovered. While making for this from the eastward of course he was bound to strike the east coast of Australia, and in fact he sighted the coast of what is now called New South Wales on April 19, 1770. Heavy surf prevented him from landing, but he soon found a sheltered bay in which he anchored.

From the ship Cook and his men could see a number of huts ashore, and a group of natives watching them. When the *Endeavour's* boats approached the shore, the natives made off, except for two men, who made a brave attempt to prevent the visitors from landing. Captain Cook and his party made their first landing on the shore of the great unknown continent of Australia, and found a wretched village, with a few canoes, 'the worst I think I ever saw'.

While the crew were collecting fresh water, Cook himself explored the bay and took soundings. The natives kept at a distance; Cook noted, 'the natives do not appear to be numerous, neither do they seem to live in large bodies, but dispersed in small parties along by the waterside. Those I saw were about as tall as Europeans, of a very dark brown colour, but not black, nor had they woolly, frizzled hair, but black and lank like ours. No sort of clothing or ornaments were ever seen by any of us upon anyone of them, or in or about any of their huts; from which I conclude that they never wear any. Some that we saw had their faces and bodies painted with a sort of white paint or pigment.'

Although these Australian aborigines were a much inferior race to the Maoris, Captain Cook came to the conclusion that they were far happier than Europeans. 'The earth and sea of their own accord furnishes them with all things necessary for life. . . . They live in a warm and fine climate and enjoy very wholesome air, so that they have very little need of clothing; and this they seem fully sensible of, for many to whom we gave cloth, etc., left it carelessly on the sea beach and in the woods, as a thing they had no manner of use for; in short, they seemed to set no value upon anything we

gave them, nor would they ever part with anything of their own for any one article we could offer them.' This seems a satisfactory proof that they really had all they needed.

During the exploration of the eastern Australian coast, a misadventure happened which nearly finished the whole expedition. One clear moonlight night the ship suddenly ran into alarmingly shallow water. Captain Cook at once gave orders to put about and come to an anchor. Unfortunately, though, as the water became deeper again, he decided to go on. This time, without any warning at all, the ship ran aground. What had happened was that he had been sailing inside the Great Barrier Reef, which runs for hundreds of miles alongside the coast of what is now called Queensland. At one point this great coral reef, built up during the centuries by skeletons of tiny creatures, turns sharply towards the shore. It was here that the *Endeavour* stuck fast.

The situation could hardly have been worse, as it was high water when she ran aground and the nearest harbour was 1,500 miles away. Cook tried to refloat her by throwing overboard guns, ballast and everything else which could be spared. It was no good—in fact, as the tide fell, the ship began to leak badly.

Even Captain Cook, the calmest of men, describes this as 'an alarming . . . and terrible circumstance'. It could indeed have hardly been worse—to be aboard a leaking ship off a completely unknown coast, and without any hope of assistance from other vessels.

However, the day after running aground, they managed to refloat her by heaving on two anchors. Their troubles were far from over, as there was nearly four

feet of water in the hold, but by pumping hard, they managed to keep her afloat. The hole was patched with a sail until they could make a proper repair. As soon as they could find a suitable place to beach her, the carpenters set to work, and spent over a month in repairing the damage.

This time Cook spent mainly in exploring ashore, and he noticed in particular large numbers of kangaroos, anthills six or eight feet high, and forests of gum trees. Once under way again, the *Endeavour* had to pick her way slowly and carefully through the Great Barrier Reef, and this was done by sending a boat ahead to take soundings. By this time, as Captain Cook remarked, they had sailed over 1,000 miles among islands and shoals without once stopping taking soundings, something 'that perhaps never happened to any ship before'.

Perhaps the worst danger of all now faced them. Although they were outside the reef, they found themselves being swept back on it by the terrible breakers, and had to use all available boats to tow the ship to a safe anchorage back inside the reef. From here Cook was able to work up the coast to the most northerly point of Australia. Here he landed, and 'in the name of His Majesty King George III took possession of the whole eastern coast . . . by the name of New Wales'.

Round Cape York and through Endeavour Strait, named after her, the stoutly built Whitby collier made for the coast of New Guinea and so to the Dutch port of Batavia on the island of Java. Before reaching port, Captain Cook collected all the logs and notebooks kept by his officers and crew and told everyone to keep all the details of their voyage absolutely secret.

At Batavia they found two British ships, and great

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must have been the excitement on board the *Endeavour* at hearing the news from home for the first time for nearly two years.

The Dutch Governor gave permission for the *Endeavour* to carry out the very necessary repairs before she set off for England. Unhappily, however, Batavia was a very unhealthy place, and about one third of the crew died of disease between arriving there and reaching England, which they did in July 1771, after a voyage lasting two years.

The expedition had shown that New Zealand consisted of two islands, and that on the east of New Holland there was another coast. It was still not realized that these were parts of the great Southern Continent, but Cook had shown where it could be if it existed. It is usually said too that the voyage had conquered the disease called scurvy, which had formerly killed so many sailors on long voyages. This is not quite true, as a doctor had already written a book showing that the disease could be avoided by eating fresh vegetables and drinking lemon and orange juice. However, although Captain Cook was not the first, he carried out the ideas of others, and until she reached Batavia, the *Endeavour* was a very healthy ship.

It was not long before it was decided to send out another expedition to follow up Cook's discoveries. Once again it was agreed that the Whitby collier was the best type of ship for the job, and this time two were fitted out and named the *Resolution* and the *Adventure*; Captain Cook was to be in command of the *Resolution*. Everything possible was supplied to make the expedition a success; warm clothing, the best food, the latest type of clock or chronometer. A landscape painter was

engaged to make pictures of the places visited, and special medals struck to be given to the natives of newly discovered countries as proof that the expedition had discovered them!

This time Cook's instructions were first to look for a cape (actually part of an island) which had been sighted years before by a French officer during a voyage from South America to the Cape of Good Hope, and which was thought to be a part of the Southern Continent. This gives a good idea of the vagueness of what was known about the whereabouts of the continent, as in fact the cape lies right on the other side of the Antarctic from Australia. If this cape were found to be part of an island, Cook was then to keep searching, as near to the South Pole as possible.

Apart from these instructions, Captain Cook was to do as he thought best, and in fact after he had searched unsuccessfully for the cape or island for some time in very bad weather and had been separated from the other ship, he decided to make for New Zealand. There he hoped to rest his crew, after searching for the *Adventure* on the way, and go on to Tasmania (or Van Diemen's Land) which had been discovered by the Dutch explorer Abel Tasman over a hundred years before. Cook wanted to find out whether it was a part of the continent, but bad weather prevented him and he made for New Zealand direct.

Landing on the South Island, this time he found the Maoris friendly: the healthy climate and the rest did the crew good, and their spirits rose even higher when after a time they found their sister ship, the *Adventure*, once more.

The plan was now to sail to Tahiti, and then (if no

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new land were discovered), to go back and explore all the unknown parts of the seas between New Zealand and the southern tip of South America, Cape Horn.

At Tahiti Cook was received like an old friend although he had to tell the Tahitians the bad news that Tupia had died on the voyage home. This time another, called Omai, joined the expedition. He eventually went back to England, was received by King George III, and was made much of.

Soon after they reached New Zealand the two ships once again were separated in rough weather, and the *Adventure* made her own way back to England. Captain Cook had no news of her until he arrived at the Cape of Good Hope, nearly a year and a half later.

The *Resolution* went on south until she came to a great icefield which completely blocked her way. There was nothing for it but to sail north again, and eventually the explorers arrived once more at Tahiti where they were received as old friends. When the time came for them to leave, both Captain Cook and his crew and the islanders themselves parted very sorrowfully. Many friendships had been made, and Cook's fair treatment of the Tahitians had given them a great respect and liking for the white men who had sailed from the other side of the world.

The rest of the voyage, which was spent in further cruising up and down in the South Pacific, was not particularly eventful, and at last Captain Cook sailed for home. He reached England in July 1775, this time after an absence of just over three years. He was now able to say 'I have now done with the Southern Pacific Ocean and flatter myself that no one will think that I have left it unexplored'. He had in fact limited still further the

area in which the Southern Continent could possibly be.

His other achievement was the use of the new chronometer—the first clock which kept really accurate time at sea. Its purpose was that it could be used to work out longitude by calculating how far east or west a ship was from the meridian of Greenwich.

Captain Cook was now a famous man; he was made a Fellow of the Royal Society, and read to that learned body a lecture on scurvy; he was presented to the King and given a post as a governor of Greenwich Hospital. He might have spent the next few years comfortably at home, but once again there was work to do which was to take him away from home for years at a time. He was now forty-seven; he had said of his new post, 'a few months ago the whole Southern Hemisphere was hardly enough for me, and now I am going to be confined within the narrow limits of Greenwich Hospital. I must confess it is a fine retreat, and a pretty income, but whether I can bring myself to like ease and retirement, time will show.'

As it happened, he was not to have an opportunity of finding out whether he liked ease and retirement. Before he even had a chance to take up residence at Greenwich there was talk of another expedition. Interest in the Southern Continent seemed to have died down, and this time it was another problem of the Pacific Ocean which Captain Cook was asked to try and solve.

It was none other than that North-East Passage which Barents, Bering and many others had tried to find by sailing round the north-east coast of Europe. The plan now was to try the other way, from the Pacific westwards. It was first decided to offer the command of

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this new expedition to Captain Cook's former second-in-command, Captain Charles Clerke, as it was felt that Cook deserved a rest.

However, as soon as Cook heard of the expedition he offered his services, which were of course accepted. Captain Clerke sailed with him, in command of another Whitby ship, the *Discovery*, while Cook himself commanded the *Resolution* once again. His orders were, in addition to searching for the way from the Pacific round North America to the Atlantic, to explore the land which lay between California (which Drake had christened New Albion) and Bering's discoveries in the far North. As they were to visit Tahiti again, they took Omai with them after his stay in London, which he had enjoyed so much that it was with mixed feelings that he left for home. Among the other members of the expedition was an officer called Bligh, afterwards to become famous through the mutiny in his ship, the *Bounty*.

Their route took them to Tasmania, New Zealand, to various groups of Pacific Islands, including Tonga, whose present Queen was such a popular visitor to our own Queen's Coronation in 1953. Here they were especially well received, for it was not for nothing that these islands were called the Friendly Islands. On one occasion a chief asked to see the Royal Marines drilled, and Captain Cook gratified his wish. Then in his turn the chief arranged a dance of his warriors, which Cook had to admit was carried out even better than the drill of the Marines, although these were famous then as now for their precision and smartness. To keep up the honour of the Royal Navy, Captain Cook then gave a firework display which impressed and delighted the islanders greatly.

After visiting Tahiti once again and leaving Omai among his own people, Captain Cook sailed north and discovered what are now known as the Hawaiian Islands. Here the natives came aboard with great wonder, for they had never before met Europeans, and everything aboard the ships was strange and new to them. When they were shown even such simple things as beads, they asked what they were for, and whether they were fit to eat.

The Hawaiians were splendid swimmers, and Cook even noticed mothers with tiny children on their backs swimming ashore from canoes 'through a sea that looked dreadful'. They were cheerful and friendly people, and Captain Cook had a genuine liking for them. Indeed, one of the most remarkable things about him was his capacity for understanding these primitive islanders—and in all his voyages he made many friends among them.

Even their habit of stealing anything they could lay their hands upon he was prepared to make great allowances for, as arising from curiosity rather than wickedness.

On leaving the islands Cook steered for the coast of New Albion and sailed northwards along it. This was in the year 1778, when the American colonists were just gaining their independence from Britain. But the American colonists were all on the Atlantic coast, and the Pacific side between Mexico and Alaska was still almost completely unknown. Indeed, it was less than forty years since Bering had discovered that America and Asia were not one continent.

As usual, Cook made careful observations of the coastline and of the Red Indians, whom he found

friendly but cautious. On through the Bering Straits the two ships sailed, and at last found their way completely blocked by impassable ice. Some time was spent in trying to find a way round or through it, but with no success. Cook then decided to return to Hawaii for the winter, and try again the following year.

On reaching the islands again, he soon found a change in the attitude of the Hawaiians towards him and his men. They came aboard as before, but whereas they had previously refrained from pilfering, they now stole everything they could lay their hands upon. When Cook went ashore, the islanders would have nothing to do with him, and he found that they had been forbidden by their chiefs to have any dealings with the white men.

After Captain Cook had been to see the chiefs, things improved again, except that the thieving went on. One day some swimmers were caught taking out the nails which held the ships' hulls together!

Then once again the islanders were forbidden to have anything to do with their visitors. There were several unpleasant incidents, and finally one of the ships' boats was stolen during the night. Captain Cook went ashore in the morning with an armed guard to bring back one or more of the chiefs as hostages until the boat should be restored.

He persuaded the chief and his two sons to go aboard with him, and the boys were already in the boat when the chief's wife called to him not to go. A large crowd gathered, and it looked as if there would be an ugly scene, so Cook gave up the idea. There had not been any violence, in spite of the threatening appearance of the crowd, and it is likely that everything would have

passed off peacefully if it had not been for an unfortunate accident.

News came to the village just at this moment that one of the ships' boats had fired at some canoes which had been trying to get out of the harbour, and had killed a chief. Things now looked really dangerous. The warriors put on their war-mats and armed themselves with spears and stones. One of them came up to Captain Cook and threatened him with an iron spike. Cook fired at him after telling him to stop, but the man was not injured, as his war-mat stopped the bullets. Stones were thrown, Captain Cook fired again and killed one of the warriors.

General fighting broke out in which a number were killed on both sides. Captain Cook stood at the water's edge, calling out to the boats to cease fire and to pull in to the shore and take the party off. It was when he turned his back on the islanders, to give orders to the boats, that he was stabbed and fell face downwards in the water. The warriors dragged his body on shore and hacked him to pieces with their daggers.

Thus died one of the greatest of British explorers, at the hands of people he liked and understood, and whom he had always treated justly and well. The survivors of the fight showed their opinion of him, according to one account, when they came alongside the ship again, by crying out 'with tears in their eyes that they had lost their father'. It is true to say that many of the islanders too were genuinely sorry at what had happened.

Captain Clerke now took command, and the ships sailed once more, as Cook had intended they should, to try and find the North-East Passage. Once again they were stopped by ice, and eventually sailed homewards,

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but Captain Clerke died on the way, and the ships were brought safely back to England under the command of two young lieutenants.

As for Captain Cook, it can best be said that his monument is the map of the Pacific Ocean which he had done more than any other man to explore.

CHAPTER VIII

INSIDE AUSTRALIA—STURT, BURKE AND WILLS

THE FIRST British settlement in Australia was mainly a convict settlement to which criminals were 'transported' from England, and was where the city of Sydney now stands. The Blue Mountains which lay behind made it difficult for convicts to escape, but made it equally difficult for others to explore the interior of Australia.

These mountains defeated explorers until well into the last century. It was only in 1813, following a severe drought, that a settler searching for fresh grazing grounds for his cattle managed to get across the Blue Mountains. After this, a good deal of progress was made in exploring the rivers which ran to the west and south from these mountains, although nobody yet knew where these rivers went.

It was at this time that Charles Sturt, one of the great explorers of the continent, came to Australia (in 1827) as a captain in the army, hating the idea of serving in a convict settlement, but he soon found Australia very different from what he had expected. He was delighted by the climate, the beautiful bays and rich cornfields of New South Wales. The geographical problems of the country he found particularly fascinating.

It was by now very important that the interior of the country should be explored, as there had been another

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serious drought, and fresh grazing was badly needed. Tradition among the aborigines said that the rivers which flowed westward ran into a great inland lake, and an expedition was suggested to find out what did lie inland.

Sturt offered to lead the expedition, and fortunately the Governor appointed him, although there were other more experienced men available. One of these, Hamilton Hume, had already explored a great deal of what is now Victoria, but readily volunteered to serve under Sturt. The object of the expedition was to find out whether the inland lake or sea really existed. They set out at the end of the year 1828.

From time to time they suffered severely from thirst, but by roughly following the course of the streams they came to a great river, between seventy and eighty yards wide. Going down to quench their thirst, they were amazed to find that the water was too salt to drink. Fortunately, though, Hume found a pond of fresh water nearby, and they were able to drink and water the cattle they had brought with them. A curious thing was that although there were footprints and other signs of human beings all around, they had not caught as much as a glimpse of a single aborigine.

Soon afterwards, while following the course of the great river, they came upon a group of about seventy large huts, evidently still used, but with no sign of any of the inhabitants. Just outside this village they surprised several natives, who ran off with cries of terror. A crackling sound soon told them that the bush had been set on fire, but as they were on high ground where they could not be harmed they waited to see what would happen next.

One of the aborigines came out of the bush and looked at them for some time, and eventually went up to Hume, who soon satisfied him that the white men intended no harm. This was one of many occasions when Hume's experience of the country and of the aborigines was of great value to the expedition.

The saltiness of the water had made Sturt think that the river flowed from an inland sea not far off, but he soon found this was not so, and that the salt came from brine springs which were running into the river.

Lack of fresh water made the party turn back, but they had accomplished a great deal. In fact they had done more than they realized, for the great river, which was afterwards called the Darling (after the Governor of New South Wales) was itself the source from which all the other rivers sprung. The Darling was not in full flood when he saw it, so Sturt did not know that he had found what he was looking for. He could not understand either where the mouth of the river could be. 'Does it make its way to the south coast,' he wrote, 'or exhaust itself in feeding a succession of swamps in the centre of the island?'

A few months after his return, Sturt was off on another expedition to try and trace the course of the Darling and answer his own question. This time, to make sure of fresh water, he decided to start off by following the river Murrumbidgee, whose waters were known to be sweet, and which Sturt correctly thought to be a tributary of the Darling.

He also thought it would be possible to travel part of the way by water, and so he took with him the frame and timbers of a strong whaleboat. This turned out to be one of those fortunate 'hunches' which successful

explorers seem so often to have. Sturt was as fortunate in his companions as they were in their leader. Hume was not able to go this time, so a youth of twenty, called MacLeay, went in his place. Of the six others, three were soldiers and the other three convicts who had been transported to Australia. Sturt put complete trust in all his companions, and found that this mixed bunch worked together in complete comradeship.

The party reached the point on the Murrumbidgee at which Sturt judged it necessary to take to the boats. He wrote in a letter, 'The Murrumbidgee is a magnificent stream. I do not know its fate, but I am obliged to abandon my cattle and have taken to the boats. Where I shall wander to God only knows. I have little doubt, however, that I shall ultimately make the coast.'

His men put the whaleboat together, and also made a smaller boat to carry some of the stores. With six picked men Sturt set off downstream, but on the second day the smaller boat struck a sunken tree and was wrecked, though most of the stores were saved. The voyage was difficult because of the swift current and the constant need for avoiding submerged rocks. Sturt wrote, 'In some places huge trees lay athwart the stream, under whose arched branches we were obliged to pass; but, generally speaking, they had been carried, roots foremost, by the current, and, therefore, presented so many points to receive us, that, at the rate at which we were going, had we struck full upon any one of them, it would have gone through and through the boat.'

However, they managed to avoid these dangers, and before long found themselves in a much larger river, broad and winding, which they named the Murray.

Their journey downstream towards the sea was most pleasant. The current carried them steadily along without much effort, they were able to help out their provisions by fishing and shooting birds, and they had the excitement of being the first white men to explore this great river.

There were several encounters with natives when it looked as if an attack was likely, but Sturt had learned from Hume that holding up a green branch was taken as a sign of friendship. He was kindly but cautious in his dealings with the aborigines, and always avoided using firearms except in self-defence and as a last resort. His usual method was to make them small presents and move off as quickly as possible.

There was one particular encounter which very nearly turned out dangerously. One night the party camped with a group of natives, and MacLeay in particular made friends with them and joined in their songs round the campfire. They believed him to be a member of their tribe who had been killed in battle some time before and had now come back from the dead.

The next day several natives, led by one big, powerful man, accompanied them for some distance by running along the river bank. When they crossed the river and disappeared, Sturt wondered what would happen next. About nine miles further down, they found a very large band of aborigines on the bank, armed and wearing their war paint.

In spite of their threatening appearance, Sturt steered directly for the bank, but noting that many of them held spears ready to throw, he put the helm over and passed them in midstream. The natives ran along the bank, unable to throw their spears because of the speed of the

boat; Sturt was alarmed to see many of them gather on a sandbank which jutted out far into the river ahead of him. They were making a tremendous noise, and Sturt began to make ready for the desperate fight which seemed no longer avoidable. He was just about to open fire when four other natives appeared, rushing along the bank. Their leader ran on to the sand, seized the foremost of the warlike party by the throat, pushed him backwards and threatened the rest with his clenched fists.

It was the biggest of their friends from the previous camp, and he and the others had evidently accompanied the explorers to help them when necessary. Indeed, they could hardly have arrived at a better time, and Sturt's gratitude was sincere.

While all this had been going on, the boat had run aground on a sandbank, and when it was refloated (with the help of the natives who had previously been ready to attack it!) Sturt found he was at the meeting of the Murray with another fine river which came into it from the north. This he correctly guessed to be the Darling, and he steered up it for a short distance. Still watched by the astonished aborigines, he hoisted the Union Jack and all the explorers gave three cheers. Then they put about and once more made their way down the Murray river towards the sea. After a stormy passage down the lower reaches, they found the river came out into a beautiful lake, beyond which was a great sand bar and the sea.

They had found the secret of the great river system of south-eastern Australia, but they had now to think of their return. The Governor had promised to send a ship to St Vincent Gulf, a bay further along the coast, to

pick them up, but to get there would have been a considerable journey, and Sturt felt it was impossible to make this on the chance of a ship.

There was nothing else for it but to go back the way they had come, but against the stream this time and on rations which allowed less than a pound of flour a day. It meant nearly two thousand miles, rowing hard all the way, in danger from rapids, floods and from the aborigines.

It was now that the true quality of Sturt's companions—soldiers and convicts alike—was finally proved. They rowed on week after week with aching backs and blistered hands, but with no complaint. Sturt wrote in his journal: 'When they thought me asleep, I would hear them in their tent complain of severe pains and exhaustion. "I must tell the Captain tomorrow," one of them would say, "that I can pull no more." Tomorrow came: and stubbornly they pulled on.'

One night a shot awoke them. They found the sentry had fired at two aborigines who were creeping up on him. However, knowing that Sturt hated bloodshed, he had deliberately fired between the two men. Sturt seems to have had an extraordinary gift for bringing out the best in everyone with whom he came into contact. Years later he was held up one night by three bush-rangers. When he protested, the man covering him with his gun recognized his voice and shouted, 'Stand back, boys. It's Captain Sturt, and we don't rob him.'

For some time after the Murray River adventure Sturt settled down on the land, but once again he was needed. The town of Adelaide had been founded in the rich country to the west of the Murray estuary, but settlers had come flocking in too fast for the available

food supplies. A famine threatened, and it was suggested in Sydney that cattle should be driven across country to Adelaide for the new settlers.

Sturt was asked to lead the first party, and he agreed, intending at the same time to survey the still unexplored parts of the upper Murray (called the River Hume, after Sturt's former companion).

The trip was harassing in the extreme; in fact, Sturt afterwards considered it the worst of all his journeys. He was constantly worried about the safety of his cattle, as any strays were picked off by lurking natives. Then too, he was anxious about his wife, whom he had to leave alone to look after his farm.

When he arrived in Adelaide he was in great demand as an adviser to the settlers, and was given an official post in which he was of much assistance in developing the new colony. But the unexplored 'outback' still called him. Others were making the discoveries, but at last Sturt succeeded in persuading the authorities to let him make one more expedition.

In 1844 he set out to try and reach the very centre of Australia. From the first the party met with difficulties and hardships. One of their objects was to bypass the great salt lakes, called Lakes Eyre and Torrens, which were blocking the growth of the Australian settlements to the north of Adelaide. Sturt struck eastwards to avoid these lakes, but as soon as he left the well-known area around the river Darling, he struck sandhills and waterless desert.

Both men and animals suffered terribly from thirst. At the end of January (the height of the summer in Australia), they found themselves sheltering from the terrible blistering heat at a place called Rocky Glen,

where there was pasture for the animals and a long sheet of water. It soon became evident to Sturt that, in his own words, they were 'locked up in the desolate and heated region, into which we had penetrated, as effectually as if we had wintered at the Pole'. They could not go forward during the drought for fear of dying from thirst, and they knew, if they went back, that there was no water between them and the Darling, two hundred miles to the south. When they first set up their camp, the lake was teeming with birds of all kinds, but the day of their migration soon arrived, and they moved off, leaving the place quite deserted except for the explorers. 'We no longer heard the discordant shriek of the parrots, or the hoarse croaking note of the bittern.'

The extreme dryness of the atmosphere had some curious effects. 'The lead dropped out of our pencils, our signal rockets were entirely spoiled; our hair, as well as the wool on the sheep, ceased to grow, and our nails had become as brittle as glass.' Sturt added: 'We found it difficult to write or draw, so rapidly did the fluid dry in our pens and brushes. It was happy for us, therefore, that a cooler season set in, otherwise I do not think that many of us could much longer have survived. But, although it might be said that the intense heat of the summer had passed, there were still intervals of most oppressive weather.'

Sturt himself and two of his companions went down with scurvy. One of the party died at the end of the stay at Rocky Glen, and was buried in the desert. The rest split up, some setting off homeward, while Sturt and the others pressed on into the heart of the continent, surveying the land as they went.

In the desert there had been hardly any sign of human

life, but now they began to meet parties of aborigines from time to time. There were also salt lagoons in plenty, but fresh water was much harder to find. Sturt was desperately keen to reach the centre of Australia. He wrote in his journal: 'To that man who is really earnest in the performance of his duty to the last, and who has set his heart on the attainment of a great object, the attainment of which would place his name high up in the roll of Fame; to him who had well nigh reached the topmost step of the ladder, and whose hand had all but grasped the pinnacle, the necessity must be great, and the struggle of feeling severe, that forces him to bear back, and abandon the task.'

Thus it was a terrible disappointment to Sturt when he had to turn back to Rocky Glen. There was no alternative, though, as the drought would have cut them off if they had gone any further. They had reached a point about a hundred and fifty miles south of the centre.

Although Sturt seldom mentioned his own sufferings, he was in a very bad way, and his health had been permanently affected by the hardships he had undergone. The rest of the party were all sick, and the surviving horses like skeletons, when they reached Adelaide in January 1846. This was Sturt's last expedition. The rest of his life in Australia was spent in administrative work.

Two more expeditions, led by a German, Ludwig Leichhardt, followed. In the first a good deal of the north-east of Australia was explored, but Leichhardt's second trip, an attempt to cross Australia from east to west in 1846, ended fatally. He and his party never returned, and the mystery of their fate has never been solved.

In 1860 another expedition, the best equipped ever to set out to explore Australia, left Melbourne. One of its objects was to find out whether good pasturelands lay in the centre of Australia, and no expense was spared to make it a success. The Government supplied money, more was raised by subscription, camels were brought from India, scientists engaged and everything planned with the greatest care. The journey was to start from a depot on the River Darling, and to finish at the Gulf of Carpentaria on the north coast.

They set off from their base in October 1860, and moved north as planned. Unfortunately, however, a great mistake had been made in the appointment of the leader of the expedition. The man chosen was a police officer, Robert O'Hara Burke, a brave and resolute man, but with no knowledge of bushcraft. What was worse, he was reckless and impatient, and before the expedition even reached its base, he had quarrelled with his second-in-command, G. J. Landells. Landells and another member, who also found it impossible to get on with Burke, returned to Melbourne. W. J. Wills, who was the expedition's surveyor, was made second-in-command.

The party reached Coopers Creek, about five hundred miles north, at great speed. They found good grazing and plenty of water, so Burke sent orders back to move the base up there. He waited six weeks for the orders to be carried out, but could restrain his impatience no longer. He decided to make a dash for the north coast, taking with him Wills and two others, six camels and a horse, and provisions for three months.

Once again they moved very fast, but their speed was very tiring to both men and animals. The camels cut

their feet on the stony ground and the horse found the patches of bog very heavy going. After about three months they arrived at the estuary of the Flinders River, just near the Gulf. They had done little real exploration, and even here they did not push on to the sea itself. Burke and Wills, who were ahead of the other two, simply made sure they had really reached the estuary, not daring to spend the extra two days which they would have needed to cut their way through the jungle to the beach.

Instead, they set off back again as fast as they could. The animals were in even worse condition than before, and Gray, one of the members of the party, was seriously ill. It does not seem that any particular effort was made to slow down on his account or to help him, and he soon died. The other three, Burke, Wills and King, managed to get back to their base at Coopers Creek. They were terribly exhausted, and only two of their six camels were left alive. All the food they had left was a pound and a half of dried meat.

They found that the base party had waited six weeks longer than had been arranged, but that, finding their provisions getting low, they had left only a few hours before. A small stock of food had been left buried under a tree, and this they eagerly ate. But they still had several hundred miles to go, and they were too weak to have any chance of catching up with the base party.

Burke made a decision which was to prove fatal. He overruled Wills, who wanted to take the sensible course of retracing their steps to their first base on the Darling. His own plan was to make for Adelaide, as he insisted that there was a cattle station in that direction only 150 miles away.

Before leaving, Burke wrote a note with this post-script: 'The camels cannot travel, and we cannot walk, or we should follow the other party. We shall move very slowly down the creek.' Before long both camels had to be shot, and the three men had to carry everything themselves. Fortunately, they fell in several times with friendly aborigines, who gave them fish to eat. While Burke was cooking some of the fish, the hut they were living in caught fire, and most of their remaining belongings were burnt.

After that they kept themselves alive with the pounded seed of a plant called nardoo. Burke and Wills became too weak to gather or pound the seeds, and King carried on for the three of them. Wills now suggested that the other two should leave him, as he was unable to walk, and go in search of help from the aborigines.

Burke and King set off, having left Wills supplied with water, food and firewood. At the end of the second day Burke was very ill and died the following morning. King went on alone and eventually found some huts, where there was a store of food left by the natives. After staying there two days to recover his strength, he went back to where he had left Wills, but found him lying dead in the hut.

King was now in a desperate plight—alone and hundreds of miles from the nearest white settlement. Luckily, though, he met some friendly aborigines, who fed him well. He pleased them by shooting some birds, and found his way still further into their favour by disinfecting a sore arm which one of them had. They treated him with great kindness for about a month, when a relief party arrived in search of him.

The only achievement of the expedition, which had

cost so much in lives and in money, was that it had succeeded in crossing Australia from south to north for the first time. More successful expeditions were soon to set out, and in the eighteen-sixties J. M. Stuart in particular found out a great deal about the interior of Australia. By 1875 the main features of the continent had been pretty thoroughly explored.



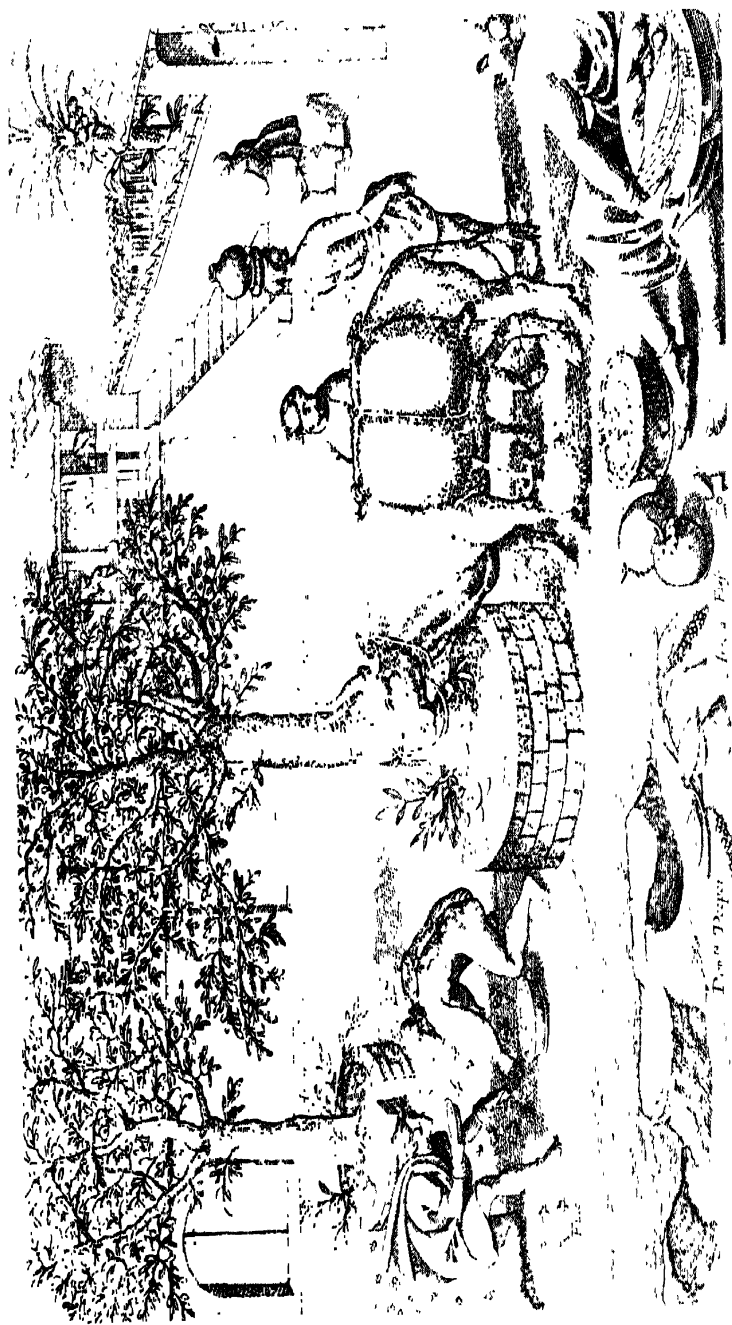
The departure of Marco Polo from Venice. From a Fifteenth Century manuscript in the Bodleian, Oxford



Marco Polo with his father and uncle



Anthony Jenkinson's Map of Central Asia



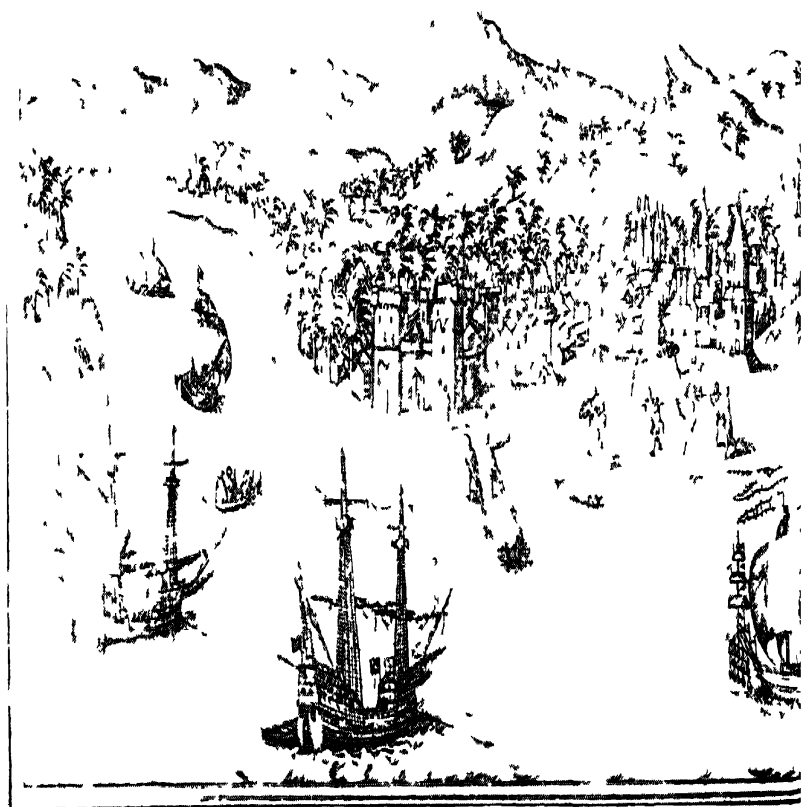
An engraving of an Indian market, made towards the close of the sixteenth century.
showing the sale of fruit and spices and of water.

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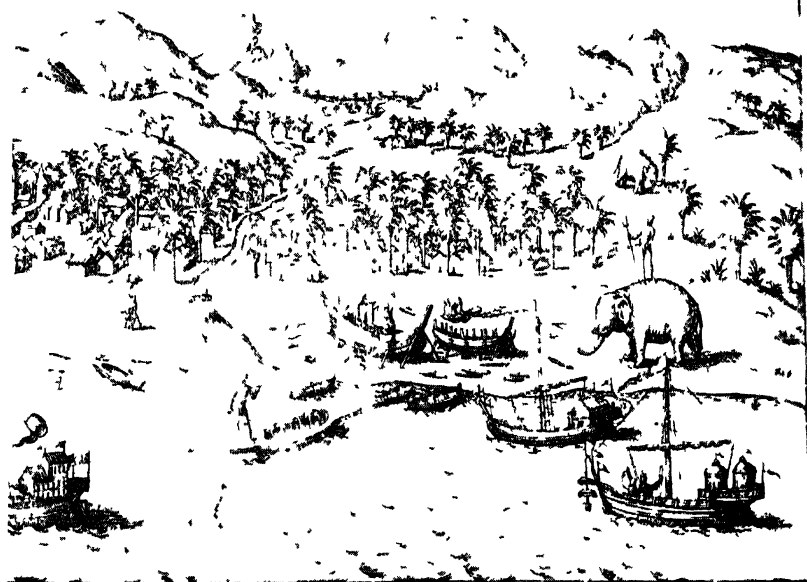
Ships off the port of Suk

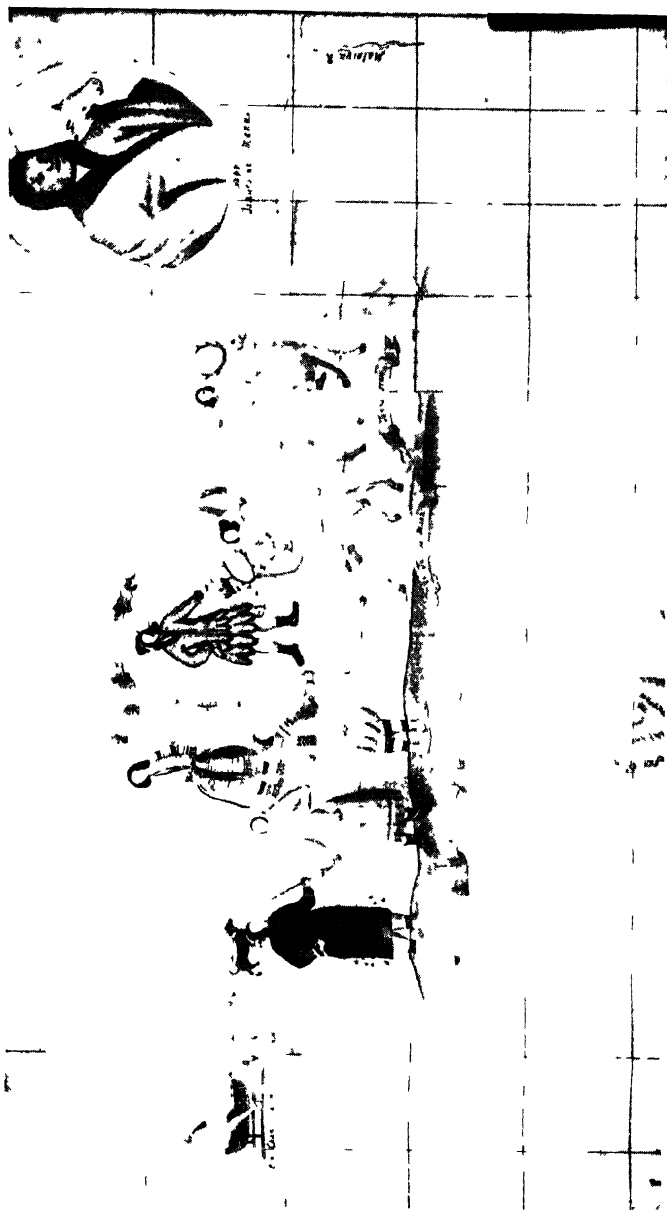
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A detail from Bering's Map, showing Tartar tribesmen



View of the Ice Islands as seen on Captain Cook's second voyage January 9th, 1773



The death of Captain Cook at Owyhee, 1779



Burke and Wills lost in the Bush



A Model of Everest showing the route taken by Hillary and Tensing

CHAPTER IX

ARABIA: BURTON AND DOUGHTY

THE ARAB countries and their people have always had a great fascination for Europeans, and the story of the gradual discovery of Arabia is one of the most exciting in the history of exploration. Many travellers, from Varthema to T. E. Lawrence, have lived among the Arabs and have written books about their wanderings. It is only possible here to give a brief glimpse of one or two.

About a hundred years after Varthema, two English sea traders, Alexander Sharpeigh and John Jourdain, found themselves in Aden. Here they had a dispute with the Governor over customs duty on their cargo. Aden was then ruled by the Turks, and the Governor decided to send the Englishmen to his superior at Sana, a long journey inland.

So Southern Arabia, the Yemen as it is called, was entered for the first time by Englishmen. Jourdain's description of it is of a curious mixture of mountains, deserts, and rich cornlands, walled towns and frowning castles. As far as its immediate object was concerned, the journey to Sana was a failure, for the Turkish Pasha there would not give way over the customs duty. Moreover, Jourdain was warned not to return through the Yemen without special permission from the Turkish Government at Stamboul. The travellers decided to re-join their ship at Mocha, on the Red Sea, which they reached without mishap, a fortnight later.

About seventy years later, in 1678, an English boy about fifteen years old started a series of remarkable adventures in Arabia. His name was Joseph Pitts, and he was captured at sea by Algerian pirates and then sold as a slave. His master was determined to make him become a Mohammedan, and after some cruel beatings, the boy gave way, or at any rate appeared to do so. He secretly remained a Christian, but learned a good deal about the Mohammedan religion and spoke Arabic and Turkish fluently. With his master he went on pilgrimage to the holy cities of Mecca and Medina, and then after many years as a slave was set free and became a paid servant. It was now easier for him to escape, which he did by joining the Turkish fleet and deserting at Smyrna. He made his way back to England with the help of a British merchant, but even then his troubles were not over. He was seized by the press gang, which used to go about forcibly recruiting men for the Navy, and spent some time in prison before he was released.

Nearly three hundred years later, another Englishman was to follow in the footsteps of young Joseph Pitts, this time an intentional explorer. His name was Richard Burton (afterwards Sir Richard), and he gained a love of travel and of learning languages very early in life, most of his childhood and youth being spent in France and Italy. At that time the East India Company had its own army in India, and in 1842 Burton went out as an officer. He spent seven years in India, travelling widely and learning languages, including Arabic and Persian. Although he did some very dangerous secret service work, he was not promoted, and returned to England at the age of twenty-seven in a very disappointed state.

Four years later he suggested to the Royal Geographical Society that he should cross Arabia, a large part of which was still unknown. The Society agreed, but the East India Company, in whose service he still remained, would only give him a year's leave of absence, 'to pursue his Arabic studies in lands where the language was best learned'.

In 1853 he left England for Alexandria disguised as a Persian, for he had decided to make his entire journey as a native of the East. In Alexandria he spent some time, like a first-class actor, 'getting into the skin of his part'. He had to get every little gesture and mannerism just right, and he succeeded so well that not once was his nationality ever questioned. After a month of visiting the mosques and holy places and practising among the poor of Alexandria as a doctor, he changed his part to that of a Persian dervish, a wandering scholar. He did this because the dervishes were always taken very much for granted in the Arab world, being allowed to wander about as they pleased and behave exactly as they wished.

The next stage of his journey was by Nile steamboat to Cairo, where he stayed in a caravanserai, a kind of transit camp for travellers across the desert. Here a merchant from Alexandria advised him to change his part once more. This friend told Burton that as a Persian he would be cursed in Egypt, beaten in Arabia, overcharged everywhere and probably left to die by the roadside if he fell ill.

Faced with this disagreeable prospect, Burton decided to be a Pathan or Afghan born in India, but living the life of a wandering dervish. After collecting stores for his desert journey, Burton set out for Suez, acquiring on

the way a youth of about eighteen, called Mohammed, who became his servant. The two of them, with four other companions, embarked at Suez in a small ship which was to take them through the Red Sea. A party of pilgrims tried to drive them off the poop of the ship, but Burton and the others beat them back with sticks.

After an uncomfortable journey lasting nearly a fortnight, they landed at the port of Yenbo, and Burton began to arrange for camels for the next part of his journey. To look after the animals he took on two desert Arabs, who refused to do any jobs, such as pitching tents, which were not connected with camels.

The party joined a caravan of about six hundred camels and set off across the desert. It was peculiarly desolate, a stony plain with here and there a little sun-dried vegetation, and in the distance great mountains of granite with enormous rocks and boulders.

The caravan travelled mostly at night, and rested during the fierce heat of the day. They had to spend some time at a wretched village about halfway to Medina, as a famous robber with five thousand men was said to be raiding not far off.

A caravan from Mecca arrived, and the two parties joined together, with two hundred cavalry to protect them. The following night the whole party was stopped by a band of Bedouin Arabs, who only agreed to let it pass if the cavalry went back. Apart from the danger of robbers, the journey was now made more difficult by the simoom, a hot wind which caused great discomfort and frayed tempers.

Firing had been heard in the distance, and when the caravan had to pass through a narrow gorge, Bedouins lined the hilltops on both sides and picked off men and

camels as they wished. All the travellers could do was to press on as fast as possible under cover of a smoke-screen, firing back at the well-hidden enemy. They got through with the loss of only twelve men, and at last reached Medina, which Burton found a very pleasant change after the desert. It had grown a great deal since Varthema had visited it 350 years before, and was now a well-built city of about 16,000 people. The houses were of wood and brick, and in some places the streets were even paved. Dominating the city was the great mosque of the Prophet, with its four towers and its green dome which flashed in the sun.

Burton lodged at the house of one of his companions and passed his time quietly, getting up at dawn, dining at eleven and resting during the heat of the day. He spent the evenings (after prayers and supper) in visiting friends or sitting in cafés with them.

The first thing he did was to visit the mosque, which he was surprised to find tawdry and mean in appearance inside. It contained what was supposed to be the burial place of the Prophet Mahomet, but Burton did not believe that he was really buried there. In any case, though, Medina was a very holy place, and its people looked on themselves as specially favoured. Even the shopkeepers were very haughty in manner, and took every opportunity of showing a stranger that they were at least as good as he was. The people were fair in complexion, and the citizens of Mecca, their rivals, said that their hearts were as black as their skins were white. Burton too found that their only Arab characteristics were pride, quarrelsomeness and vindictiveness. They were dignified and pompous, but the slightest annoyance would make them shout and scream with rage.

At the beginning of September a caravan for Damascus left Medina, and Burton went with it. He had come safely through perhaps the most dangerous part of his journey, for he was now getting nearer to Jidda, where there was a British consul to whom he could escape if discovered. He still had to be very careful, as on the road to Mecca any local official could bribe a Bedouin to get rid of any suspected person.

The caravan followed the eastern road to Mecca, which no European had travelled before. There were now about seven thousand men, women, and children—the rich carried in brightly coloured litters, the others on horseback or camel-back, and the poorest on foot. They were alternately parched by the simoom wind and soaked by cold rain from the hills. The country was difficult, bare and stony and with very little water. Many of the weaker animals died, so that the ground was strewn with the carcasses of camels, horses and donkeys. What wells there were were guarded by soldiers, who always demanded high payment for water.

To make matters even worse, there was trouble between the Damascus caravan and that bound for Baghdad, which had joined it on the way. Describing the men in the latter party, Burton wrote, 'I never saw a more pugnacious assembly; a look sufficed for a quarrel.' One night, after a fight, a Turk mortally wounded an Arab and left him to die.

But the travellers were soon to be reminded that their greatest danger came from elsewhere. One evening, when less than fifty miles from Mecca, the caravan entered a narrow pass. Instead of the usual uproar a sudden silence fell, as if an attack was expected. Almost at once, a puff of smoke appeared above and there was

the sharp crack of a rifle. One of the leading camels rolled over dead, throwing its rider several yards.

The caravan was thrown into confusion, and the air was filled with the screams of women and children as they pushed forward in a panic-stricken attempt to get away from the danger. The narrow pass was soon jammed with a mass of people, and it looked as if many of them would be helplessly shot down.

But the wild tribesmen of the Baghdad caravan galloped up on their camels. One section began firing on the enemy, while another swarmed up the slope towards them. Order was restored, and the caravan began to move on.

The next morning they passed through a rich valley, and the pilgrims began to strain their eyes for their first view of Mecca. The holy city lay in a valley, however, and was still invisible when darkness fell. Early in the morning, Burton was awakened by shouts and cries of 'Mecca, Mecca!' He looked out from the litter in which he was being carried and saw by the light of the stars the faint dark outline of a large city.

He spent some time in Mecca, visiting all the holy places without detection, and it was not until he was aboard ship at Jidda, ready to sail for Suez, that even his Meccan servant suspected that he was an Englishman. Although not the first European to visit the holy cities of Arabia, Burton had added to our knowledge of other parts, especially the eastern pilgrim route from Damascus.

As far as he himself was concerned, one of the main objects of the pilgrimage was to gain the prestige and importance of a *haji*, as those who have visited the holy cities are called. This, he felt, would help him in future explorations in the Arab lands.

But during the next twenty-five years Burton's explorations were in Africa. He went on an expedition into Somaliland, and another into Equatorial Africa. His next journey into Arabia had rather a curious origin. You remember that when Burton was preparing for his pilgrimage he was advised by a merchant to travel as an Afghan. Now this same merchant had told Burton how he had discovered some sand of an unusual colour near the Gulf of Akaba, north of the Red Sea, and that on examining the sand he had found that it contained gold. Since hearing this story Burton had firmly believed that gold was to be found in Midian, at the extreme north of Arabia.

The ruler of Egypt, years later, thought that Burton might be right, and that an expedition to discover gold might be a way of helping his country out of its financial difficulties. So he sent for Burton and asked him to lead the party. The merchant who had discovered the gold, although now over eighty years old, was persuaded to join in the search, and did in fact go part of the way.

After a short reconnaissance, for Midian was quite unknown to him, Burton set off with four other Europeans and a large party of miners, quarrymen, soldiers and servants. They made a careful survey of the land, but although they found traces of gold elsewhere, there was none at the place the merchant had mentioned. Burton was still convinced that there was gold to be found in the district.

The party rested for a time and then set off again, at first through wild country, but then across a wide plain of golden sand with hills around, from which there were magnificent views. For several days they admired the splendid scenery through which they were passing until

suddenly Burton saw about a dozen Arabs above them on a hill, yelling and threatening to fire. The sight of his soldiers coming up made the Arabs decide to be friendly, and one of them went off to ask his sheikh's permission for the party to go through his territory. The result was that five leading men of the tribe arrived with thirty horsemen. These newcomers showed no sign of friendliness, but agreed to guide the expedition on its way the next day.

That night was bitterly cold, as it often is in the desert, in spite of the heat of the day. Burton was unable to sleep, and he lay awake wondering what was to be the fate of his expedition. The next day's journey took them through a long narrow gorge, in which unfriendly Arabs could easily have ambushed the party. Burton's worries were made more acute by hearing his guides sending off messengers in all directions, and discussing among themselves the best ways of getting together enough men to kill him and his companions.

He realized that the only sensible course was to get out, and he ordered his men to strike camp and load up the camels. It looked at first as if there would be trouble with their Arab guides, but once again the gleaming rifles of Burton's soldiers won the day without firing a single shot.

The return journey was made in a wide semi-circle, surveying all the way and collecting specimens. Burton had now explored a good deal of this unknown part of Arabia, especially the coastal area. Back in Egypt, he found that the experts were not at all impressed by his twenty-five tons of specimens. However, the ruler of Egypt was delighted with the results of the expedition, and promised to pay Burton for all the gold and other

minerals which were mined in Midian. It all came to nothing, though, because the next ruler of Egypt decided that his country was too poor to start any new schemes of this kind, however profitable they might be.

Although Burton was certainly one of the greatest of modern explorers, it is as a writer that he is chiefly known today. He wrote books about his travels in Arabia and in Africa, but it is his great translation of the *Arabian Nights* on which his lasting fame now rests. Some scholars have criticized it as being too different from the original, but it certainly shows his great knowledge of Eastern life and customs, and is a very lively translation of a wonderful collection of stories.

Another of the great English travellers in Arabia, Charles Montagu Doughty, is still famous for his writings. After graduating at Cambridge in 1865, he spent ten years of further study at Oxford and in several continental universities. Then he started to travel, usually on foot and alone, through Southern Europe, Egypt and Palestine.

One day he was in an Arab coffee-house at Maan, south of the Dead Sea, and was told of some cliffs with ancient inscriptions on them, at a place called Medain Salih, far to the south. He made up his mind to visit them, partly out of curiosity, but mainly to get material for a book which he hoped would make the English language great again as it had been in the days of Queen Elizabeth I.

Doughty knew that he could not enter Arabia alone, so he went back to Damascus and lived there for a time. In 1876 he decided to join the pilgrim caravan and travel with it as far as Medain Salih, wait there while the pilgrims went on to Mecca, and then return with them.

After reaching the place and making copies of the inscriptions, however, he started on a series of wanderings in the desert.

Unlike Varthema and Burton, Doughty travelled openly as a Christian, which meant that he suffered the danger of being molested by the wandering Arabs as well as the normal dangers of the desert. Yet he won the respect of the tribesmen, and until the later stages of his journey was interfered with hardly at all. Indeed, he returned to one town and found that since his previous visit the well which supplied the people with water had collapsed. The townfolk thought this disaster was due to the Englishman's 'evil eye', but the desert Arabs tried to protect him and pleaded with him to escape before he should be killed.

He met with a mixed reception at a town called Hail. The Arab ruler distrusted him but helped him on his way. When he returned to Hail, though, the chieftain was away, and Doughty was not even allowed into the town. At the next town, he was no better received. Things were serious, for he was alone in the middle of Arabia, without even a guide. Further on he found friends who hid him from the unfriendly mob and gave him a camel to take him towards the coast. They also provided a guide, but the fellow deserted at the first opportunity.

It was now the hottest part of the year, and Doughty was four hundred miles from Mecca, his first objective before reaching the coast. He followed the caravan, but hardly anyone was prepared to give him food or water. As he got nearer to Mecca, it became clear that he would find it impossible to find an Arab who would guide him safely to the coast. About this time he had the most dangerous of all his adventures, when an Arab rushed

at him with a knife. He was only saved from death by an old negro, who had him brought to his master, an important chief, at Taif, near Mecca. On the way Doughty was often insulted and threatened, and at least once more someone tried to murder him.

Once at Taif, however, he found the Grand Sherif, as the chief was called, friendly and prepared to help him. Doughty was in a bad way—ill, suffering from boils and dressed like a beggar. He was fed and clothed and supplied with guides to conduct him to the port of Jidda. He had spent nearly two years in the desert, and had accumulated a vast store of notes on the country, the people, natural history and geology.

After leaving Arabia, Doughty spent nine years writing his book which he called *Travels in Arabia Deserta*. It was highly praised by most of the leading critics, but was not popular with the public for a long time. Its later success was largely due to Doughty's great admirer, T. E. Lawrence, who said of it that it was 'a book not like other books but something particular, a bible of its kind'.

CHAPTER X

TIBET

TIBET HAS always been a mysterious and unknown country. The high mountains surrounding it have kept intruders out, and during its very long history few Westerners have succeeded in visiting its capital, Lhasa, 'the Forbidden City'. In fact, for many centuries, the only European visitors were Catholic missionaries, the first of whom, Friar Oderic, travelled through Tibet on his way home from China in the fourteenth century.

Three hundred years later, Father Antonio de Andrade made a daring journey into Tibet to investigate rumours that Christian communities were to be found there. The rumours he found to be untrue, but he was allowed to return and build a church. From 1626, when this first Christian church was built in Tibet, until 1630, Andrade lived in Tibet with several fellow-missionaries, learning the language and trying to convert the Tibetans from Buddhism to Christianity.

After Andrade was recalled, the mission station was destroyed, and it was not until nearly 80 years later that a return to Tibet was seriously considered. Even then, there was delay, and it was only in 1712 that an Italian Jesuit, Father Ippolito Desideri, was chosen to re-establish the mission. After receiving the blessing of the Pope, he left home on his long journey. His first adventure was not long in coming; off the Spanish coast, a Turkish ship tried to attack them, and their ship had to put in at

a Portuguese harbour. In April 1713, Desideri put to sea again, in company with a Portuguese fleet bound for Goa. In his account of his travels he says very little about the voyage to India, which took about four and a half months. After landing at Goa, he set off via Delhi, where he met another missionary, Father Emmanuel Freyre, who had spent twenty years in India, and who offered to accompany him to Tibet.

Freyre was appointed leader of the expedition, no doubt because of his experience of the East. The two Fathers journeyed to Srinagar, in Kashmir, by a road through mountains which Desideri describes as 'like staircases piled one on the top of another'. Srinagar he found to be a well-built and beautifully situated city, with a great river running through it, and delightful lakes with ornamental gardens on their shores. Fruit and flowers of many kinds grew abundantly, and Desideri reports that Kashmir was called by a name which meant 'Earthly Paradise'. The very fine wool, which we call cashmere, was even then woven in great quantities in Srinagar.

But even the 'Earthly Paradise' has a very hard winter, and soon after Desideri's arrival the roads to Tibet were blocked with snow. It was impossible to move on until May, when the snow melted, so the two missionaries took a house for the winter. They were treated with great honour, and before they left were given letters of introduction to influential people in Tibet.

The next part of the journey lay through even steeper mountains, still covered with deep snow and ice. The travellers were glad to take shelter in the fortress of the Prince who ruled the border province of Tibet. This Prince entertained them to dinner, gave them a valuable

present and sent men to guide them on their way across 'a rather alarming bridge'.

Alarming it was indeed; it was the only way of crossing a wide and rapid river. 'From one mountain to the other two thick ropes of willow are stretched nearly four feet apart, to which are attached hanging loops of smaller ropes of willow about one foot and a half distant from one another. One must stretch out one's arms and hold fast to the thicker ropes while putting one foot after the other into the hanging loops to reach the opposite side. With every step the bridge sways from right to left, and from left to right, therefore only one person at a time can cross. Besides this, one is so high above the river, and the bridge is so open on all sides, that the rush of water beneath dazzles the eyes and makes one dizzy.'

After this experience, the two Fathers rested at a town where the Governor treated them with great kindness and sent them on with presents and a letter of introduction to his father, who was Prime Minister of the country. After forty days travelling from Kashmir, the important city of Leh was reached, the capital of what Desideri calls 'Second Tibet', nowadays part of Kashmir.

The greatest danger of this part of the journey was from avalanches, and Desideri himself had a particularly narrow escape. While travelling through a valley between two high mountains, he noticed a great rock shaped like an elephant. Moving closer to examine it, he had hardly made twenty steps when the others shouted a warning. With 'a noise like loud thunder', an enormous mass of snow fell from the mountain on to the very spot he had just left.

The whole of this journey had to be made on foot, along paths so narrow that they had to go in single file. All the food and luggage had to be carried by porters, and there was no shelter from the bitter cold and the frequent snowstorms.

Leh itself was a fine city built on a hillside, with two great buildings, the Royal Palace and the Residence of the Great Lama, or Chief Priest. Once again the Fathers were hospitably received, and the King was at once told of their arrival. He soon received them, seated on his throne and surrounded by his court, but afterwards they were able to visit him without any ceremony.

Some merchants from Kashmir who were in Leh became jealous of Desideri and his companion, and spread a story that they were really rich traders who had come to Tibet to sell precious stones and other valuables. The King, when he heard this, sent a message that he would like to buy their merchandise himself. Desideri convinced him that they had none, and that they were really in Tibet as missionaries and not traders. The merchants from Kashmir were forbidden to enter the Court, and the King asked the Fathers to remain in his capital and preach as they wished.

Father Freyre had been so weakened by the journey from Kashmir that he wanted to give up and return to India at once. He could not face the idea of going back the same way, so he enquired about other possible routes. He found that it was impossible to reach Kashmir again without crossing the mountains, but that beyond 'Second Tibet', where he now was, lay another one, the capital of which was Lhasa. It seemed possible that from Lhasa he would be able to return to India.

Desideri thought his companion faint-hearted, and strongly objected to the plan. However, he had to give way, and after a stay of two months at Leh, the pair set off for Lhasa. It was now the middle of August, 1715.

At first the country was mountainous, though less difficult than before. The mountains then gave way to wide plains, where the danger was of a different nature. Here were pools of stagnant water and sulphurous springs. Not only was the water poisonous, but the bad air could cause severe sickness. However, Desideri found that by avoiding as far as possible drinking the water, and by chewing herbs, it was possible to remain healthy.

The next stop was at a town on the border of 'Second' and 'Third' Tibet. From this point the route lay across a terrible desert, which it would take about three months to cross. An attempt to do this without guides would have meant certain death, so Desideri tried to find an escort. Fortunately, a Tartar Princess who was bound for Lhasa with a large body of soldiers readily agreed to let the Fathers travel with her caravan.

Winter was coming on by the time they started; Desideri explains that this was the best time for the journey, as the roads were impassable earlier owing to rain. The Princess's servants and some of the cavalry rode in front; then the lady herself and her officers and ministers; then more cavalry and finally the food and baggage and a crowd of people on foot. The baggage train alone must have been of a very considerable size, as provisions for hundreds of people for three months had to be carried, as well as food for the horses.

The Fathers were now dressed in knee-length Tartar coats made of sheepskin, with the wool inside, and the outside covered with woollen or cotton cloth. Wearing

these, and with sheepskin hoods over their heads, they were able to keep fairly warm and free from danger of frostbite. At one point the glare from the snow affected Desideri's eyesight, and he says he would have lost his sight if he had not been told to rub his eyes with snow.

During the journey the Fathers rose at daybreak, loaded their tent on to a horse, saddled the other horses, drank some tea and then set off. They rode until sunset, pitched their tent, said prayers while their servants prepared a meal and after eating tried to sleep. The bitter cold and the insects which lodged in their sheepskins usually prevented them from getting a good night's sleep. However, their belief in the value of their work as missionaries, as well as the great kindness and hospitality of the Tartar Princess, helped them to endure all hardships.

One evening at dusk, Desideri, who had been riding with the Princess, found that Freyre was no longer with the caravan. His alarm was increased when, during the night, the servants arrived with the news that his companion had remained behind to wait until his exhausted horse had recovered its strength. When the Princess heard this, she at once sent soldiers back with a spare horse. The night was very dark, and it took the Tartars a long time before they found Freyre buried in snow and the interpreter who was with him half frozen. The horse had been unable to get up, and the two men had not dared to move for fear of being completely lost.

Early in January, the Princess became seriously ill, and the caravan was halted for several weeks until she recovered. She had sent messages to Desideri and Freyre, begging them not to go on without her, as she particularly wished to have the honour of bringing them to

the end of their journey. Finally, ten months after leaving Kashmir, they arrived at the city of Lhasa. Freyre left for India as soon as he was able, and Desideri was left behind, the only European in the whole of Tibet.

He was first received by the Commander-in-Chief of the army, to whom he explained his reason for visiting Tibet. Both this officer and the Prime Minister showed him many proofs of friendship, and the latter offered to arrange a private audience with the King. Desideri, however, asked for two days in which to buy some presents. These, and the conversation he had with the King, were very successful, and he was promised all the help and protection he needed for as long as he remained in Tibet.

A short time later, the King personally intervened when some Customs officials were unjustly demanding money from Desideri; the officials were made to apologise. Chance gave him an opportunity to be of service to the King and to the Viceroy, when they were both taken ill as a result of poison which had been given to them some time before. Desideri happened to have some medicine, which he gave them and which cured them very quickly. Refusing the presents they offered him, he said once again that all he wished was to carry on his work as a missionary.

He spent his time, from early morning to sunset, in studying the Tibetan language and religion. In less than a year, he had written a book in Tibetan, in which he set forth what he considered to be the errors on which the religion of the country was founded. This he presented to the King, who read it with great care, and suggested that Desideri should make a further study of

the Tibetan religion with the help of the most learned Lamas, or priests.

After spending some months in a monastery, he moved to the University of Sera, just outside Lhasa. Here his studies were interrupted by war. Tibet was invaded by the Tartars, and helped by treachery among its inhabitants, they eventually captured Lhasa. The King and some of his ministers took refuge in the Potala, the palace of the Dalai Lama, or chief priest, but it was captured. The King was killed in action, and his followers put to death or taken prisoner; the Viceroy alone managed to escape. Lhasa was plundered by the Tartars, and Desideri thought it safer to retire to a distant part of the country.

The Emperor of China, a friend and close relation of the Tibetan King, sent an army against the invaders. The Chinese troops were surrounded and forced to surrender to the Tartars, who treacherously slaughtered them all. The Emperor, now even more determined to defeat the invaders, sent a far larger army, which eventually drove them out of Tibet. For the remainder of Desideri's stay in the country, it was governed by ministers appointed by the Emperor.

Desideri describes Tibet as a very barren country, with no big towns, and only villages on the lower slopes of the mountains where fresh water was available. Wheat and barley were grown in the more sheltered places, and some vegetables and fruit, but no great variety of either. 'Gold is to be found everywhere in Tibet, but there are no mines as in other countries, the people simply separate it from the earth and sand.'

Lhasa was a very fine city with large and spacious stone houses of two and three storeys in height. The

owner usually lived on the top floor, and let the others to a number of families. The floors were beautifully made, of tiny coloured stones cemented together and polished. Each house had its own chapel, with statuettes and religious books, lamps kept always burning, and offerings of food. The King's palace was in the centre of the city, on one side of a great square.

There were many temples, but the greatest building of all was the Potala, where the Dalai Lama lived. This was built on a high rock, and approached from a handsome square surrounded by high walls with gates like a fortress. A wide and splendid staircase led up to the top of the rock, where the palace stood. The Potala contained treasures of all kinds, which were plundered by the Tartar invaders when they captured the palace.

The Tibetans were a law-abiding race, but used barbarous methods to deal with those accused of crimes. One of these was to make the person lick a red hot iron three times; if his tongue were not burned he was declared innocent! Another was to put a black and a white stone into a vase filled with boiling oil, and make him take one of them out, innocence being proved by taking the white stone without burning the hand.

In normal times, Tibet had no army, but only kept enough soldiers to guard the King. Although a peaceful people, they were fond of archery and shooting with muskets, and in time of war, they made brave and loyal soldiers.

Their dress Desideri describes as 'unlike that of any other nation'. Out of doors they wore yellow woollen hats shaped like a mushroom, indoors a smaller cap of the same material, with flaps to cover the neck and ears in cold weather. Woollen shirts, wide quilted jackets,

red trousers and leather boots were the usual costume. The garments had no pockets, so any articles carried about were slung from a sash worn across the chest, or from the belt.

The women wore hats of light thin wood, varnished inside and covered with patterns of coloured beads on the outside. Both men and women were very fond of earrings, and in addition the latter usually wore several necklaces. Black and red petticoats, with shirts and ornamented jackets, long red cloaks, and trousers and boots made up their dress.

The food of the Tibetans was meat of various kinds, fish, eggs, rice, turnips, peas, fruit and milk, butter and cheese. They all drank tea many times a day, made in large earthen pots, and with milk and melted butter added. The water was not fit to drink, and a kind of beer made from barley was very popular. It was made in different strengths, the weakest being kept for the women and children, and the strongest for the men.

Desideri's stay in Tibet was brought to a close in 1721, when it was decided by the Roman Catholic Church that the Jesuits should no longer be allowed to have missionaries in Tibet. He accordingly set off on his return journey through Nepal to India, where he spent nearly six years at a mission station before returning to Europe.

During the next two hundred years a number of Europeans visited Tibet, and as we shall see, one of them, the Russian Colonel Prejevalsky, explored a good deal of the country between 1877 and 1888, although he never succeeded in reaching Lhasa.

In the present century, Tibet has been less fortunate in keeping out of the affairs of the rest of the world. Her

position between China, Russia and British possessions in India led to a British expedition being sent to Tibet in 1904, when British troops fought their way to Lhasa in spite of the brave resistance of the Tibetans. Since then Tibet has been invaded more than once by the Chinese, the last time being in 1920, since when the country has been once again cut off from the western world.

CHAPTER XI

CENTRAL ASIA: N. M. PREJEVALSKY

IT IS perhaps not surprising that Central Asia should have been largely unexplored until fairly recent times. The enormous distances, and the hardships involved in crossing the Gobi Desert kept travellers at bay until the last century.

The first of the modern travellers in these parts were two French missionaries, the Abbé Huc and the Abbé Gabet, who went out to Mongolia in 1843. So little was known about that part of the world that the two Fathers had little idea of what kind of conditions they would find or what manner of people they were to try to convert to Christianity.

In spite of great hardships, they travelled widely in Mongolia and even succeeded in visiting Tibet and penetrating to the 'Forbidden City' of Lhasa itself. The Abbé Huc wrote accounts of his travels, which in spite of inaccuracies attracted a great deal of attention and stimulated other travellers to follow in his footsteps to the inner parts of Asia.

The country which was most interested in these explorations was Russia, and the man who did most to follow them up was Nicholas Prejevalsky. His parents were landowners, and it is said that when he was a small boy he so often played truant to wander in the woods and fields that he was regarded as the 'bad boy' of the district. After a good education at the

local grammar school, he was sent into the Russian Army.

He might easily have settled down to the easy life of an army officer of those days if he had not a persistent hankering after travel to distant places—that curious urge which as we have found seems to be the mark of the born explorer. Prejevalsky soon tired of routine army duties and applied for service on the Manchurian border. For some reason or other this request for unpopular duty led to his being put under arrest for three days! He next entered the Staff Academy and then became a teacher at the school for young officers. In 1867, however, when he was twenty-eight, he managed to get himself sent on duty to Eastern Siberia. Here he spent two years, occupying his spare time in hunting, shooting and studying the natural history of the area. On his return, he published his notes, which gave a good deal of information about Russia's eastern borders and which earned him a medal from the Russian Imperial Geographical Society.

The following year the Society asked him to lead an expedition into Southern Mongolia. The Army gave him permission and at the end of 1870 he and another officer, Lieutenant Pyltseff, set out for Peking, where they stayed until the spring. Fierce fighting was going on in China at the time, and Prejevalsky had to change his plans. He therefore decided to make an experimental journey into Eastern Mongolia, travelling north from Peking. The dirt, the smells, the crowds of beggars, and above all the hostile attitude of the Chinese towards 'foreign devils' made the enforced stay in Peking most unpleasant.

The explorers had nobody to help or advise them in their preparations, as none of the Europeans in the city

had ever travelled beyond the great wall which marks the old boundary of China. It was utterly impossible to find a Chinese or Mongolian guide, so the two explorers decided to make their journey alone, except for two Cossacks who were to help with the horses and camels. In spite of the very meagre funds which the Russian authorities had allowed for the expedition, they managed to get pack animals, guns and ammunition and apparatus for preparing specimens and drying plants. They were unable to afford an interpreter, and intended to get most of their food by hunting. Another difficulty was that 'small change' in China was so cumbersome, half-a-crown's worth weighing nearly eight pounds!

However, at last all was ready, and they set off into unknown Asia. At first their way lay across plains, but as they approached the Great Wall of China, the country became mountainous. They arrived at the town of Dolon-nor (now Tolun) cold and tired but without mishap. They were well treated at one of the temples, where they asked for shelter, and a house was put at their disposal.

After a day's rest, they felt well enough to set out again, and made for the lake of Dalai-nor, further still to the north. They found three feet of ice on the lake although it was the middle of April, but were able to shoot enough ducks and geese to keep themselves in food.

After spending nearly a fortnight by the shores of the lake, they went back towards Dolon-nor. All the time Prejevalsky had been surveying the country, although the absence of landmarks made this very difficult. He had to be careful not to be seen doing it, as the Chinese or Mongols would have objected.

He thought out a good way of outwitting them, by showing people his field-glasses and explaining that he used them in searching for game. They then thought that his compass was used in the same way and he was able to take bearings without arousing suspicion. This time the party only stopped in Dolon-nor long enough to buy a few stores, and then headed for a town called Kalgan, just inside the Great Wall. Once again they were travelling across a plain. Here was plenty of good grass but the water, although abundant, was very nasty. This is how Prejevalsky described it: 'take a tumbler of water mixed with a teaspoonful of dirt, flavour with a pinch of salt, add a little lime for colour and goose droppings for smell, and you will then obtain a liquid similar to those in most of the Mongolian lakes'.

At Kalgan they re-formed their caravan and were joined by two Cossacks who replaced their previous servants. One of the new men was able to act as interpreter. They now had eight camels and two horses, as well as a setter dog called Faust to help with hunting. The experimental journey of two months had taught Prejevalsky a good deal about travelling in Mongolia, and he felt ready to start off on a longer expedition.

This time the plan was to explore the Ordos plains, between the Great Wall and the bend of the River Hwang Ho, in Inner Mongolia. At a Roman Catholic mission station on the way, they hired a Mongol who had been converted to Christianity. His duties were to interpret and to help with the camels, but he deserted after the first day, taking a knife and revolver with him. For a fortnight afterwards, the four Russians took it in turn to act as sentries during the night, but they were never attacked.

When they reached the mountains near the Hwang Ho, they found plenty of wild sheep. In spite of their speed and agility, these animals were very inquisitive, and could easily be stalked and shot after a little practice.

The Mongols in these parts were quite friendly, but made themselves a nuisance because Prejevalsky was pretending to be a trader. The local people would insist on looking at all the goods, refuse them as being too dear, and then ask for something which they knew the 'merchant' did not possess. If the travellers wanted to buy anything from these Mongols, they would have to start by drinking tea and making polite conversation. Hours later haggling over the price would still be going on, until at last the buyer and seller agreed.

Prejevalsky soon tired of all this, and decided to pass as an official, instead of a trader. This made things much easier, as he was able to tell inquisitive visitors that his journey was no business of theirs, but that the Emperor of China knew all about it. Even so, they had great difficulty in 'passing through the Chinese villages, as Prejevalsky's description shows. 'A large crowd would assemble'; he wrote, 'all the inhabitants, young and old, ran out into the streets, or climbed up on the palisades or roofs of their houses to stare at us with unmeaning curiosity; the dogs howled in concert and snapped at poor Faust; startled horses neighed, cows lowed, pigs squeaked, fowls flew hither and thither; in short, all was noise and confusion. We would generally let the caravan advance, while one of us remained behind to ask the way. The Chinese would then approach, but instead of answering our question they would handle and examine our saddles and boots, look with awe at our guns, inquire whither we were bound, whence and wherefore

had we come, etc. As for the directions about our road, they were entirely omitted, and only as an exceptional piece of good luck would a Chinaman point in the direction we had to go. From the number of crossroads leading from village to village such directions as these were an insufficient guide, and we therefore went at haphazard until we came to another village, where the same experiences were repeated.'

However, they arrived safely in the mountainous country on the northern bank of the Hwang Ho. Here the wonderful views and the rich woods and alpine flowers made a very welcome change from the monotony of the plains they had been crossing. To reach the Ordos region, however, they had to go down into the valley of the great river and make for a town called Bautu. Here they were well received by the Chinese governor, but could only find very dirty lodgings in a house which was full of opium-smoking soldiers. They could not go out without being followed by an inquisitive and noisy mob. When they went indoors, the police who were guarding them locked the gate and let people in if they paid for admission!

The travellers managed at last to buy stores in the town and to get permission from the governor to cross the river by the ferry. They were now inside the great bend of the Hwang Ho, in the Ordos country they had come to explore. On three sides it was bounded by the river, and on the southern side by the Great Wall of China, so that it was like an island between China and the Gobi Desert.

Prejevalsky found it to be a level sandy plain with a few low hills. There were no towns, and except in the Hwang Ho valley, where there were Chinese farmers,

very few people. He decided to keep near the river, because he wanted to trace its course, and also because it was the only part of the region where there were any plants or animals to study. The river itself was wide and deep, and was used a good deal by boats taking supplies to the Chinese soldiers posted along the banks.

One plant which was grown by the farmers in the valley was liquorice, which was sent by boat to Southern China, where it was in great demand. They also grew poppies for opium, although this was against the law; opium-smoking had spread to the Mongols from the Chinese. The drug is so powerful that those who smoke it soon find that they cannot do without it, even for a few days, and they soon become miserable wrecks, unfit for anything. Prejevalsky himself tried it once, out of curiosity, but 'it produced no effect whatever on me, and its taste reminded me of burnt feathers'.

It was now summer, and the heat was so fierce that the animals could not put their feet on the burning sand during the middle part of the day. The party camped for a time by a lake and made notes about the various features of the country. The Mongols were suspicious when Prejevalsky made some observations of the stars, but fortunately he remembered that a number of meteors were due to appear in the sky that night. He told the Mongols that the stars would shoot across the heavens, and when he was shown to be right they bothered him no longer. Prejevalsky also heated water to find, by noting the temperature at which it boiled, how high the land was. The Mongols were suspicious of this too, until he told them it was the Russian way of praying!

There were many legends in this district about the great Mongol warrior Jenghiz Khan. One was that he

was buried there, and that in his tomb lay the body of a man apparently asleep. Every evening, the Mongols said, a roasted sheep or horse was laid near the tomb and by the morning it was all eaten. They believed that Jenghiz Khan would come to life again between eight hundred and a thousand years after his death, and would lead his people against the Chinese once more. Prejevalsky tried to find out where the great warrior's tomb was, but the Mongols absolutely refused to tell him.

Further up the river the country changed to sand hills where only reeds and shrubs could grow. The Mongols had a superstitious fear of this desert, which they thought was haunted by the ghosts of warriors killed in the battles between their ancestors and the Chinese. They also believed that treasure was hidden in the sands, but that anybody who touched it would die at once.

Curiously enough, there were wild cattle in this desert, the descendants of animals kept by the Mongols in former times. They were so timid that in spite of the Russians' skill as hunters, they only succeeded in shooting four bulls all the time they were in the district. By drying the meat in the sun, and by catching fish in the river, they managed to eat fairly well.

The party was only able to travel for two or three hours in the morning before the heat became unbearable. When they halted, the main meal of the day was prepared, and after they had eaten they would go off hunting. One day they had a serious misfortune, when Pyltseff's horse fell down a steep bank into the river and was drowned. This was the more infuriating because it was due to the laziness of their Mongolian servant, who had gone to sleep instead of looking after the animals.

There was no way of getting another horse, so the unfortunate Lieutenant Pyltseff had to learn to ride a camel.

The town of Ding-hu now lay in their way, and they could not avoid going through it, as they had to cross the river again. While they were still miles away, the people climbed on the town walls to watch them. Soldiers put off in a boat and demanded their passports, and Prejevalsky crossed over with the Mongol and one of the Russian servants to see the governor. He found a miserable little town which had been almost destroyed in the wars. It was surrounded by a mud wall 'so rotten that a good blow with a stout oaken stick would almost suffice to make a breach in any part of it'. The only people there were about five hundred Chinese soldiers.

After waiting in a wretched shed which smelt strongly of garlic, Prejevalsky was told that the governor would see him. The governor was a pompous fellow, who first suggested that the passports were forged, and then that the travellers were selling guns. He gave Prejevalsky the chance of proving that the weapons were used for hunting by taking him outside to show that he could shoot. After the Russian had killed a sparrow on the wing and hit a brick at long range, the governor tried, but with much less success. One of his officers entertained Prejevalsky to a meal, and after various formalities, he was ferried back to his camp.

The next morning an official and some soldiers appeared, and began to search the Russians' belongings. Fortunately it was done so inefficiently that nobody noticed the surveying instruments. Prejevalsky next asked the governor for a pass to let him continue his

journey, but the latter insisted on first examining the stores himself. While doing so he kept a number of things, including two pistols, but when Prejevalsky protested, he stopped the inspection. Needless to say, the articles he had taken were never returned.

After various delays and annoyances the party started off without the governor's permission. They now found themselves in the southern part of the Gobi Desert, a district called Ala-shan. Here there was nothing but level sand with grass and stunted bushes, but wolves, foxes, and other animals managed to live there, as well as several kinds of birds and enormous numbers of lizards. The Mongols who lived there made a living chiefly by breeding camels.

On the second day they reached a spring of pure water, and rested for a time by it. The summer was now over, and travelling was much easier in spite of the hard country. At the end of September, the travellers reached a town called Din-yuan-ing, where for the first time they were made welcome. The Prince sent three officials to meet them, and their first question to the travellers was, 'are you missionaries?' Only when Prejevalsky had answered in the negative would the officials shake hands with them.

To everybody but missionaries the Prince of Din-yuan-ing was kindly and hospitable. Every day he and his sons sent the travellers baskets of fruit from their garden, and the young Princes spent a good deal of time with them. The chief officials of the court also visited the Russians, and bought all the merchandise they still had with them.

Their best friend was a priest who was the Prince's most important adviser. This man had spent some years

in Tibet, and never tired of telling Prejevalsky about that unknown country. The Prince himself, although he had sent presents, did not receive the travellers until they had been a week in his capital. He then sent for them and asked them many questions about Russia. The reason for his dislike of missionaries soon became clear, when he said he had been told that some of them put out the eyes of Chinese children and used them for making cameras! Another odd idea was that France and Britain had to pay tribute to the Tsar of Russia.

When the party left the town, the Prince gave them guides to take them through the mountains of Ala-shan. Here Prejevalsky and Pyltseff spent most of their time in hunting the mountain sheep. After a fortnight in the mountains, they returned to Din-yuan-ing, for practically all their money had gone and they had to give up the idea of going any further.

At the end of October they set off on the way back to Peking; Pyltseff was very weak and ill, and the whole party suffered severely from the cold. Their camels were stolen on the way, and they had to spend many days in trying to get them back. When they failed, they had to spend the last of their money on buying more camels, and then hurry on to Kalgan.

Prejevalsky left the others at Kalgan and went to Peking to get money for a new expedition. Altogether the preparations took two months. New guns were bought, with plenty of ammunition, and two Cossacks were taken on to replace the last two, who had not been very trustworthy. Another important preparation was to buy four water barrels as they had previously suffered severely from thirst. It was the middle of March 1872 when they left Kalgan once more. By the end of May

they were back in Ala-shan, and their friends the young Princes sent guides to conduct them to the capital. This time Prejevalsky had brought his splendid uniform as a staff officer of the Imperial Russian Army, and this made a great impression at the Prince's court.

The object of the journey now was to reach Lake Koko-nor, in the wild mountains away to the west. Fortunately there was a caravan at Din-yuan-ing which was going nearly as far as the lake, and the Russians determined to join it. Unfortunately, though, the Prince tried to prevent them from leaving, and already they were short of money. They managed to sell a rifle to one of his sons, but owing to the delay the caravan started without them. But at last they managed to get clear of the town, and overtook the caravan before it had gone very far.

Travelling with the caravan they found very tiring as there were only four of them to manage the camels. They had to keep up with the rest and load and unload the animals at each stopping-place. Most of the travelling was done at night, and although completely exhausted they found it difficult to rest during the day. Apart from the heat, they were constantly disturbed by inquisitive visitors who wanted to examine their guns and other possessions and who never tired of asking how everything worked! All this made it very difficult for Prejevalsky to make notes, and he often had to loiter behind the caravan to get a little privacy.

The first part of the journey lay across desert country, but all at once, when they reached the Great Wall of China once again, it gave way to cultivated fields and Chinese farmhouses. Just beyond the Wall the caravan stopped at a small town where the Chinese soldiers

greeted Prejevalsky with a few words of Russian. Here he had the usual trouble with officials and with inquisitive soldiers bursting into his tent all the time.

On leaving the town the caravan struck into the mountains of Kansu where there was rich pasture for the animals and plenty of fresh water. Prejevalsky would have liked to stop and study the wild life here, but the Chinese in the caravan were terrified of meeting robbers, and insisted on pressing forward. There were one or two false alarms and a few shots were fired, but they met no robbers.

One of the Cossacks fell ill, however, and the Russians had to stay behind for several days, so Prejevalsky had his chance after all. His party overtook the caravan at a town called Chobsen, where a large house was put at their disposal by the Buddhist monks who had a large monastery there.

The Russians spent the summer in the Kansu mountains, which were particularly rich in all kinds of wild life. Although there were many bands of robbers in these parts, they were never attacked, as reports of Prejevalsky's wonderful rifles and his skill in using them had spread far and wide. He himself was regarded as a magician, whom bullets could not harm, and he took care not to deny this report.

Back in Chobsen in the early autumn they found that the robbers had just visited the town in their absence, taunting the garrison with such remarks as 'where are your Russian friends now with their good guns? We have come to fight them.' The people of the town were in a panic, and all went into the monastery at night, leaving the Russians camped outside the town. However, a week passed, and there was no sign of the robbers.

Prejevalsky's main object now was to get guides to take him to Lake Koko-nor. Fortunately, three Mongols came to Chobsen from the direction of the lake to sell their sheep. They were persuaded to act as guides, and early in October the party set off. Chinese troops were fighting the bandits in the country they had to pass through, and this made their journey even more difficult, as the local people had orders not to sell food to anyone except soldiers. Moreover, the Chinese troops had a bad reputation for plundering anybody they came across, and on the second day the travellers had an adventure with some of them. A band of about thirty charged the caravan, firing into the air and uttering wild cries. When they were near enough to see that the Russians showed no sign of fear and were ready to open fire, they became friendly and said it was all a mistake!

On the third day they had to go through a pass, in which they could see about a hundred bandits waiting for them. Once again their lack of fear made the enemy give way, and they were allowed to pass unmolested.

Without any further trouble, Prejevalsky's party reached Lake Koko-nor. He wrote, 'The dream of my life was accomplished, and the object of the Expedition gained! It is true that this success had been purchased at the cost of many hardships and sufferings; but all past trials were forgotten, as we stood in triumph on the shore of the great lake, and gazed with admiration on its beautiful dark blue waves.'

Although the lake was 10,000 feet above sea level, the country around was fertile, and was inhabited by a race called Tangutans, very like the Tibetans, their neighbours to the west. They made their living by keeping great herds of yaks, a type of Asiatic cattle. Although

some of them were quite wealthy, they lived in wooden huts or miserable tents, and were disgustingly dirty in their habits. When they were not looking after their herds, they used to rob and plunder the unfortunate Mongols who also lived in the region.

Prejevalsky had hoped that it might be possible to get right into Tibet from Koko-nor, but he was now forced to admit failure in this respect. He had had to buy more camels to replace his worn-out animals, and this had used up nearly all his remaining money. However, he decided to push on as far as possible, relying on hunting to provide all the food that was needed. The disappointment at having to change his plans was made all the keener by meeting a Tibetan official who promised him help and told him he would be well received in Lhasa, the capital of his country.

While travelling through the Koko-nor region, Prejevalsky found that reports were spreading that he was a great saint from the West who was on his way to visit the Dalai-Lama at Lhasa. Although this story kept robbers off, it also caused a great deal of embarrassment to the travellers, as crowds of people used to come to their tents to pray to them! Sick people also visited Prejevalsky to be cured, but his supply of medicines soon ran out.

After crossing the salt marches of Tsaidam, their route lay across high mountains all the way to Tibet. Here travelling was difficult because of storms and also because of the lack of oxygen in the air at such a height. Nevertheless, many wild animals, including the yak and the wild ass, managed to live in these mountains. It was difficult to get close enough to the yak to shoot it, but Prejevalsky became expert at stalking this powerful

animal. On one occasion he had to fire thirteen bullets at an enormous bull before he succeeded in killing it.

The two and a half months of winter which the Russians spent in these mountains were the worst of the whole expedition, and even Prejevalsky, who was never given to exaggeration, described them as 'a hard struggle for life'. Even in their Mongolian tent they were cold and uncomfortable. Their clothes were in tatters, and instead of boots they were reduced to covering their feet with bits of yak-hide.

However, Prejevalsky was quite convinced that they could have reached Lhasa if they had had more money, but they only just had sufficient to buy more camels for the return journey. They reached the banks of the River Yangtse-Kiang before sorrowfully turning back, knowing, in Prejevalsky's words, 'that neither nature nor man stood in our way, and that the want of funds was the only obstacle to our reaching the capital of Tibet'.

On the return journey they decided to cross the Gobi Desert from Ala-shan to Urga, which no European had ever done. It was now the summer of 1873, and they travelled through a desert which Prejevalsky described as 'so terrible that in comparison with it the deserts of Northern Tibet may be called fruitful'. At one point they lost their way while looking for a well, and the whole party nearly died of thirst. A great blow was the loss of their faithful dog, Faust, which had accompanied them in all these dangerous travels through unknown Asia.

At last, in the middle of September, they reached Urga, after eighteen months of travel. Altogether they had travelled seven thousand miles in the three years since the beginning of the first expedition, and about

half of this distance had never been surveyed before. Apart from his geographical discoveries, Prejevalsky became known for his study of the plants and animals of inner Asia. The Mongolian wild pony was called 'Prejevalsky's horse' after him, and he was the first to discover and describe the wild camel.

In 1877, Colonel Prejevalsky, as he now was, made a journey from the south-eastern border of Russia down to the incredibly remote lake Lop-nor, hundreds of miles to the north-west of the point where he had had to turn back four years before.

These journeys made him famous among the learned societies of Europe, but he was still not satisfied. His dream of reaching Lhasa was still a dream, but during his later expeditions he never forgot it. In fact, he was on a journey which might have brought him there when he died in 1888, near Russia's Far Eastern frontier.

CHAPTER XII

EVEREST

IT IS difficult to discover how the idea of climbing the world's highest mountain first arose. For a long time it was thought to be quite impossible. Sir Francis Younghusband tells how in 1885 he was discussing with a surveyor in India a reported climb to 24,000 feet (5,000 feet lower than the summit of Everest). The surveyor was quite sure that the report was wrong, as 22,000 was the highest any human being could possibly climb.

But expeditions went out to the Himalayas and several peaks over 22,000 feet were climbed. It was still some time before Everest itself could be attempted, as the Nepalese and Tibetan governments would not allow expeditions through their countries. In 1909, an Italian climber, the Duke of the Abruzzi, went out with a well-organized expedition. Not only did he reach a height of 24,000 feet, but he and his guides spent nine days at a height of more than 21,000 feet. It had previously been thought impossible to sleep properly and keep warm at this altitude.

After the first World War, the idea of climbing Everest itself began to be considered. An Everest Committee was set up, and the Tibetan Government gave its permission for the attempt to be made. Very little was known about Everest at that time—hardly anything, in fact, except that it was 29,002 feet high, and that, seen

from a distance, the top part looked like an even slope which it would be possible to climb.

The first expedition, then, was bound to be a reconnaissance—an attempt to find out what the upper part of Everest was really like. One of the greatest of all climbers, George Mallory, was sent up the great glacier to the north face of the mountain, but found himself stopped by terrible cliffs between him and the ridge which led to the summit. He did manage to find a gap, though he was unable to reach it. He reported that it should be possible to reach the gap (afterwards called the North Col) from the opposite direction, and the whole expedition moved round to the eastern side of the mountain. This time, Mallory, by very skilful mountaineering, managed to climb on to the North Col. He was still 6,000 feet from the summit, and had to return, but he had found a way to the summit. It was the way which all the other expeditions were to follow until Eric Shipton's reconnaissance of 1951.

In the following year, the first expedition to make a real attempt on Everest set out. As well as Mallory, Norton, Somervell and Finch, also great and famous climbers, were members of the expedition. One all-important question which had to be decided before they started was whether or not to take oxygen cylinders. The lack of oxygen in the air at great heights was now known to be the greatest obstacle to prevent the summit being reached.

On the other hand, oxygen cylinders were heavy, and every extra pound in weight which had to be carried was a hindrance. Was it worth while? It was finally decided that it *was* worth while, so the expedition set off with its supply of oxygen cylinders, each weighing thirty pounds.

Three hundred baggage animals and sixty porters went with the expedition. The animals included a large number of yaks, the Tibetan cattle which look rather like Highland bulls and which can live on the very coarsest grass.

The result of the expedition was disappointing, because of lack of experience with oxygen and also because not enough time was spent in getting the climbers used to the high altitudes before attempting Everest itself. However, one party reached a height of 26,700 feet without oxygen and in spite of bad weather.

Another party then went up, using oxygen and giving their porters a start of an hour and a half. In spite of the weight of their oxygen apparatus, which was heavier than the porters' loads, they easily caught up. At 25,000 feet they ran into high winds and had to pitch camp for the sake of the porters, who had to get back to the base.

Every Everest expedition has depended a great deal on these porters, the tough cheerful Sherpas from Nepal, and all the great climbers have become very attached to them. On this occasion, George Finch, who was in charge of this first attempt with oxygen, said that when the Sherpas went off down the ridge in the biting wind, they were cheerfully singing.

Finch and his two companions (one a Sherpa) crawled into their tent and tried to keep warm. The tea they made was only tepid, for at that height you can drink boiling liquid without burning your lips. During the night a hurricane tore at the tent, and for eighteen hours the three men hung on to it with all their strength. If they had relaxed for a moment, they and their tent would have been hurled down the glacier. The noise of the hurricane outside and the flapping of the tent itself

were so deafening that they could barely hear one another's voices.

At last the wind dropped to something less than a gale. It was early afternoon, and they could have returned to the camp. But the three of them, Finch, Captain Bruce and Tejbir the Sherpa, determined to hang on for another night and try again the following day.

They had only one day's supply of food left, and had just settled down for the night after a very meagre meal, when they were astonished to hear voices outside. Six of the Sherpas had come up from the camp with thermos flasks of beef tea. This is what Finch said of them: 'These splendid men had, of their own accord, left the North Col that afternoon as soon as the storm had abated, and made the tremendous journey up to our camp just to assure themselves of our well-being. This is but one example of the many acts of brave, unselfish devotion performed by the porters of the 1922 expedition.'

Although the beef tea warmed them for a time, the lack of solid food made itself felt. The night was appallingly cold, and they were only saved from freezing to death by breathing oxygen. The next morning they set off early. The sun was shining but there was an icy wind. When they reached 26,000 feet Tejbir collapsed and had to be sent back.

In spite of a rapidly freshening wind, Bruce and Finch made another 500 feet, and then decided to escape its full force by going round on to the north face of the mountain. It was a difficult decision, as the ridge they had been climbing had been cleared of snow by the wind, while the face consisted of sloping slabs of rock covered in fresh snow.

They climbed about half way across the face and then started to go straight up. They reached 27,300 feet, only 1,700 feet from the summit, when Bruce's oxygen supply failed. Finch was able to repair it, but found that Bruce was completely exhausted. There was no alternative but to return, and in spite of the high wind, they reached camp safely.

A month later a third attempt was made, this time by Somervell, Mallory, Crawford and fifteen Sherpas. Somervell and his leading party had halted at the top of the first steep slope to let the Sherpas catch up, when they heard what Mallory described as 'an ominous sound, sharp, arresting, violent, and yet somehow soft like an explosion of untamped gunpowder'. It was an avalanche, a great fall of snow dislodged by the warm monsoon wind.

The whole party was buried by the snow. Somervell and his companions and the next rope of five Sherpas managed to dig themselves out and went to search for the others. Of the nine remaining Sherpas they found only two alive—one they could not find at all. This terrible accident made them and future climbers realize the dangers of Everest when the monsoon is on.

Other things, too, had been learned as a result of this expedition. Two high camps were needed—one at 25,000 feet, and one above 27,000—and they should be set up by other men than those who were to attempt to reach the summit. The last climb should not be attempted by more than two men, but there should be a support party ready to help them if necessary, and to protect them on the way down. Useful information about clothing had been found out—such as that several layers of silk and Shetland wool are better than one or

two layers of heavy clothing. The value of careful acclimatization, and of not going too high before the whole party is thoroughly used to the conditions was another useful lesson.

The next expedition, the third, set out in 1924. A number of its members were new to Everest, including a young climber (he was only twenty-two) called Andrew Irvine. This time there were to be three high camps, the third at 27,200 feet, and the final attempt would be made from there by two parties each consisting of two men. At the lowest of the three camps four more men would wait—to help the others if necessary, or to make a third and fourth attempt. Of the first two parties, one was to try with oxygen and the other without.

The whole party was full of confidence, but after a good start they had a serious setback. Bad weather forced a supply party of Sherpas to go back, leaving another party of Sherpas stranded with hardly any food at the next camp. The latter party (or most of them) struggled back, and the whole organization was completely wrecked. However, Colonel Norton, who was in charge of the expedition, quickly got things sorted out.

Terribly bad weather held the expedition up for some time. Two Sherpas died, a number of others were ill, and the rest were unusually depressed. The Sherpas are devout Buddhists, and it was arranged that the local Lama should give his blessing to all the members of the expedition. After that the porters were their normal cheerful and energetic selves again.

Eventually, Somervell and Norton with a few selected Sherpas set out for the summit. Somervell was handicapped by severe throat trouble and the lack of oxygen

affected Norton's eyes so that he was seeing double—a very dangerous thing when every step counted. In spite of this, and the fact that he had exhausted himself by fighting against blizzards earlier on, and by his part in the rescue of some marooned porters, Norton managed to reach a height of well over 28,000 feet before turning back. It was a great achievement in the face of the most appalling difficulties.

Mallory had now made up his mind to take Irvine with him on an attempt to reach the top with the help of oxygen. The two of them set off with their Sherpas, while another climber, N. E. Odell, with two more porters, was to act as a kind of support party.

The next morning Odell was able to watch from a crag the tiny figures of Mallory and Irvine high above him. They were probably at a height of 28,000 feet, and although they were some hours behind their schedule, they appeared to be going strongly. This was the last that was ever seen of these two brave men.

Back at the camp, Odell and the others kept watch all night, hoping to see a flare or a signal from Mallory's electric torch. But they saw nothing, and the next day Odell went back up to the next camp. The weather was now stormy again, and Odell and his two Sherpas passed a very bad night. The next morning he went on alone and eventually reached the highest camp.

He now knew that Mallory and Irvine must be dead, as the tent was empty, the compass he had left for Mallory was still on the floor, and nothing had been touched since he was there last. Nobody knows what became of Mallory and Irvine, though perhaps the most likely thing is that they were roped together and one of them made a slip and the other was unable to hold him.

For eight years the Dalai Lama would not allow another expedition through Tibet, but in 1920 he gave his permission, provided that all members of the expedition were British. A very strong team was got together, including that very great climber Eric Shipton (on his first attempt); F. S. Smythe; Wyn Harris; L. R. Wager; Jack Longland; and as leader Hugh Ruttledge.

The two previous expeditions had found out a great deal about Everest, and the long interval since 1920 had given plenty of opportunity for the problems to be studied in the light of this experience. Stores and equipment had been greatly improved, and altogether it was felt that the expedition had a very good chance of success. Bad weather might have caused delay in the early stages, but Ruttledge intended in any case to take things slowly. This time gradual acclimatization was to be the policy, and oxygen was only to be used as a restorative.

Early in May the third camp was set up and from it Smythe and Shipton went to reconnoitre the North Col. They found that the old route was now a sheet of smooth and impassable ice. With great difficulty they cut a path across it, and in spite of the fact that the steps were completely wiped out by a hurricane, the next camp was set up according to plan on the North Col itself. Further progress was held up once more by blizzards, and the highest camp (beyond that just mentioned) had to be evacuated as a result of an appalling hurricane.

However, it was re-established, and the next camp (Camp VI) set up at 27,400 feet. Wyn Harris and Wager, who were to make the attempt to reach the top, moved in, and Longland set off to guide the eight Sherpas back. Another blizzard sprang up on the way, and Longland

spent two hours fighting his way through the snow-laden gale before he found the camp.

The next day Wyn Harris and Wager started very early, in biting cold, to climb the north-east face. On their way they found an ice-axe which could only have belonged to Mallory or Irvine, as nobody else had ever been there before. They found the ridge to be unclimbable, and tried the route followed by Norton and Somervell, along the side of the mountain. This too was difficult, as the way lay over snow-covered rocks which sloped like the roof of a house. Time was getting short, however, and they had to turn back at 28,100 feet, but on the way Wager managed to climb on to the ridge above where they had found the ice-axe. He is the only man who has ever looked down on to the south-eastern face of Everest.

Back at Camp VI, they told their story to Smythe and Shipton, and then went down to the next camp. Smythe and Shipton were now ready for their attempt, but a snowstorm kept them in their tent all the next day. This was a serious matter, as it meant that two nights must be spent at well over 27,000 feet, where they were bound to lose strength and energy rapidly.

The effects soon made themselves felt when they started off the following day, for Shipton's strength failed two hours later. Smythe went on alone, but had to give up at about the same point as Wyn Harris and Wager and Norton had reached. It was fortunate for him that he had not gone on, as another of the sudden and terrible Everest storms broke while he was in his tent and Shipton was on his way back to the next camp below. Shipton had a narrow escape, and so did Smythe later, on the way back from Camp VI.

Once again the attempt had failed. The weather had been too consistently against them, but in spite of this, a certain amount had been learned. The main problems now were whether the monsoon period might not give better weather for an attempt on the summit, and whether such an attempt might not be best made up the ridge on the west side. This had seemed to the last expedition to be a promising route.

In 1920 the Tibetan Government gave permission for another expedition, and it was decided to send Eric Shipton with five climbers and a surveyor to try and find the answers to these questions. They spent some time testing the snow slopes on the North Col and found them safe, but on the way down discovered to their alarm that an enormous avalanche had broken off the entire face below them without their hearing a sound. They spent the next two months climbing on other peaks, and proved that during the monsoon season the snow never becomes solid and packed above 23,000 feet, nor does the wind sweep it away. Thus Everest could not be climbed during the monsoon by the northern route. To test the western routes they climbed to the foot of the west ridge, but were not able to find out very much.

The following year another full expedition set out, again with Rutledge in charge. When they arrived at their base, Everest was in perfect condition for the attempt, but snow soon fell, and the entire mountain was covered throughout the expedition's time there. The monsoon arrived much more quickly than usual, and brought with it more snow.

After a long period of waiting and an unsuccessful attempt to climb the North Col, Shipton and Wyn Harris decided to have one more try. They started well,

but soon the snow began to break off into an avalanche, carrying Shipton away with it. Wyn Harris leapt to the edge of the crevasse, dug his axe into the hard snow and threw his weight against it. Just as the axe was being pulled out by the weight of the moving snow, the avalanche stopped—and Shipton was safe.

It was now obvious that nothing further could be done this time, and the expedition withdrew. There had now been six expeditions and it was felt that the knowledge and experience gained were sufficient for success if only the weather were suitable.

The next attempt, the last to try Everest from the north, set off in 1938. It consisted of only seven climbers, under Tilman who had climbed Nanda Devi (over 25,000 feet) with a party of similar size.

Two types of oxygen apparatus were taken, one through which pure oxygen is breathed (called the closed circuit type), and another which allows oxygen and air to be breathed at the same time.

Once again the mountain appeared free from snow, and the first three camps were set up without trouble. This time, however, the expedition was held up by a number of the climbers developing sore throats and high temperatures. There was time to spare, and Tilman decided to give everyone a chance to recuperate by going down the Kharta glacier.

When they returned to camp, they found the situation entirely changed. A week's snow had left the whole of Everest covered, and it remained so for the rest of their time. Tilman and two others tried to get up the north ridge and in spite of deep snow they reached 24,500 feet. They found that the pure oxygen type of apparatus was quite useless, while the open type worked well.

Later Camp VI was set up in bad conditions at 27,200 feet. Smythe and Shipton had to give up their attempt because of powdered snow which made climbing impossible; Tilman and Lloyd were similarly unsuccessful. So ended the last attempt to climb Everest from the north. Then came the war, and after it ended the Tibetan authorities would not allow any more expeditions. Later the Chinese Communists took over Tibet, and this route was finally closed.

Another chance soon came. The other way of getting to Everest lay through Nepal, and the Nepalese Government had always refused to allow expeditions through. In 1920 they began to relent, and allowed a small party through on its way to a mountain range to the west of Everest. The following year British and French expeditions were allowed through western Nepal; the French climbed Annapurna, which, at 26,493 feet, was the highest mountain yet climbed by man.

Finally, in the autumn of 1920, an American party, accompanied by Tilman, was allowed to be the first western expedition to approach the southern slopes of Everest. They were not there long enough to discover anything new, but it was a start.

What was needed now was a reconnaissance to discover whether there was a possible route from the west side. The Nepalese gave permission and a party consisting of Dr Michael Ward, Tom Bourdillon, W. H. Murray and Eric Shipton was joined in Nepal by two New Zealanders, E. P. Hillary and W. H. Riddiford.

They spent several months in a thorough exploration of the western approach to Everest, and found out practically everything they had set out to discover. On

the whole it seemed that the advantages of the western route outweighed its disadvantages.

One curious thing seen during the reconnaissance was the footprint of the Abominable Snowman, or the *Yeti* as the Sherpas call it. The Sherpas all believed that this curious creature lived on the upper slopes of Everest, and a number of them claimed to have seen it. One of them described it as about five feet six inches in height, with no tail, and covered in reddish-brown hair. Whatever it may be, the tracks were certainly found at a height of about 18,000 feet, and were photographed. The prints showed pad and toe marks, and were about a foot long and recently made. Shipton and Ward followed them for about two miles before losing them. Nobody has yet put forward a completely convincing explanation of the creatures (for there were at least two of them).

It had been hoped to follow up Shipton's reconnaissance by a full British expedition in 1920. In the end, the Swiss were found to have made a claim already to try that year. In the end, after plans for a Swiss-British expedition had broken down, the Swiss party set off under Dr Wyss-Dunant. The first attempt on the summit had to be abandoned owing to bad weather, but the following day they tried again. Raymond Lambert and two others with seven Sherpas, including the famous Tenzing, made up the party. Several Sherpas had to go back, but the rest spent a terrible night in the wind and the cold. They crouched in their tents, unable to unroll their sleeping bags or even to stretch their legs. The next day they reached 26,000 feet, and had a more comfortable night.

In the morning, three more Sherpas had to go back,

and Tenzing and the three Swiss set off again. This time they camped at 27,550 feet; the night was worse than the first, but by slapping one another they managed to keep up their circulation. In spite of very bad weather they set off again early, and managed to reach a height which they reckoned as 28,215 feet, higher than any man had ever reached before. It was a magnificent attempt.

We have seen that each expedition was helped by those before, and it was certainly so in the case of the ninth British expedition, which set up its first base-camp at the end of March . The new route had been tried out by the Swiss up to about 800 feet from the summit, and their experience was of great value to Colonel (now Brigadier Sir John) Hunt, who was in charge. The other members of the expedition were Major G. C. Wylie, G. C. Band, T. D. Bourdillon, Dr R. C. Evans, A. Gregory, E. P. (now Sir Edmund) Hillary, W. G. Lowe, C. W. F. Noyce, Dr Michael Ward and M. H. Westmacott. In addition, the famous Sherpa, Bhotia Tenzing, went as a full member of the expedition; Dr Pugh was physiologist and T. Stobart the photographer.

The equipment was the best ever supplied to an Everest expedition, and nothing was left to chance. The warm clothing had been tested for lower temperatures than any the expedition actually encountered; special boots had been designed, lined with fur and made of special non-freezing leather. (This was an important detail, as previous climbers had often wasted precious time in thawing out their boots after a night in camp.) The stores weighed between seven and eight tons, and getting them out to India and up to Nepal was a complicated job in itself. It took 350 porters to carry them from Katmandu, the capital of Nepal.

Training and acclimatization were very carefully carried out, and the party moved up in good health and spirits, to get ready for the attack. 'Attack' is quite an appropriate word, as the whole expedition was organized with the precision of a military operation. This time eight camps were planned, and in the end an old Swiss camp was used as well, so that there were actually nine. This prevented the porters having to wear themselves out by carrying stores very long distances in one hop, as had happened with previous expeditions.

In spite of heavy falls of snow, things went pretty well according to plan, and the climbers remained in excellent health. There was a certain amount of delay caused by the difficulty of cutting a route to the South Col across the Lhotse Glacier. This had to be done with great care, so that the porters could get the stores safely up to the last camps, and it was successfully done by Wilfrid Noyce. Thus Camp VII was set up at over 26,000 feet, ready for the first attempt on the summit. The selected climbers, Bourdillon and Evans, used a new type of 'closed' oxygen apparatus and succeeded in reaching a height of 28,500 feet, before exhaustion and lack of oxygen supplies forced them to return. They were only 500 feet from the summit, and nearly 300 feet higher than the point reached by the Swiss. It was a splendid start, as this climb had been regarded more as an advanced reconnaissance than as an attack on the summit. They discovered that there was a previously unknown ridge between the South Summit and the real summit, and that it looked like tough going.

The second party, Hillary and Tenzing, set off with Lowe and Gregory and a Sherpa called Ang Nima, and set up a camp on 28 May at 27,900 feet on the ridge

above the South Col. The others went back and left Hillary and Tenzing to settle down for the night. They managed to get some sleep, and kept themselves warm the rest of the time by brewing hot drinks.

They set off early the next morning, encouraged by fine weather. The views on the way up were magnificent as they were now above all the other mountains. They could see row after row of the most impressive peaks in the world as they climbed slowly but steadily up the steep ridge towards the South Summit.

Four hundred feet from the South Summit they came to a steep and dangerous slope, where the snow might easily break off in an avalanche and carry them 11,000 feet down to the glacier. They carefully packed the snow hard at each step, but even so they sometimes slid back several feet before they were able to stop. However, the snow became harder as they climbed, and by 9 o'clock they were on the South Summit.

They now had to make their way along the narrow ridge to the true summit of the mountain. It was impossible to keep to the crest of the ridge, as it was overhung with ice and snow which would break off if they stepped on it. Hillary cut a long line of steps on the side of the ridge, and they moved along with great care.

After an hour of this exhausting work, they found a rock face forty feet high barring their way. Hillary's first thought was that they could go no further, but he noticed a crack between the ice and the rock, into which he managed to wedge himself. With a great effort he managed to wriggle up it and help Tenzing up with the rope.

Once more they had to set to work cutting steps in the snow. It was tiring work and the summit never

seemed to get any closer, but just as they were beginning to feel they would never reach it, the ridge fell away in front of them. There, and only forty feet above them, was a rounded cone of snow, the summit of Everest. They set foot on it at 11.30 a.m. on May 29, : thus at last was the climax of all the work on Everest reached.

After fifteen minutes on the summit, mainly spent in taking photographs, they made their way down towards the South Col. They rejoined their comrades in excellent fettle; indeed, the whole expedition had gone admirably, thanks to all the climbers and indeed to all the scientists, research workers and others who had made success possible.

CHAPTER XIII

WHAT NEXT?

YOU MAY be wondering by now what remains to be done in the field of exploration, and perhaps thinking that now even the summit of Everest has been reached, the discovery of Asia is practically complete. This is not true; the fact is that although the main outlines are known, there are still plenty of details to be filled in.

As Eric Shipton has pointed out, the Himalayas are only a small part of the highlands of Central Asia, and beyond them there are great areas still to be explored. Even in the Himalayas themselves, expeditions have concentrated on the great peaks like Everest and Kanchenjunga. Now that Everest has been conquered, climbers are free to turn their attention to the many other mountains which have never been climbed. A New Zealand expedition under Sir Edmund Hillary has already been to the Himalayas, and this year (1920) a party led by Charles Evans succeeded in climbing Kanchenjunga.

But apart from mountaineering, there is work to be done in Central Asia which will keep explorers busy for a very long time to come. Exploration has become more and more scientific, and more and more specialized. One great modern explorer, Sir Aurel Stein, made a number of expeditions into different parts of Central Asia. He was mainly interested in archaeology, however,

and although he found out a great deal about other aspects of the regions he visited, he could not be expected to be an expert in all of them. New discoveries lead to others which have to be followed up, and all the time scientific 'back-room boys' are helping the explorers in their work. One kind of exploration I have not mentioned at all, although scientists are very busy on it at the present time, is the exploration of the bottom of the sea. But that would need a book to itself.

